Oil, Paint and Drug Reporter

THE CHEMICAL MARKET AUTHORITY

November 19, 1956

NPVLA Convention Report Page 3

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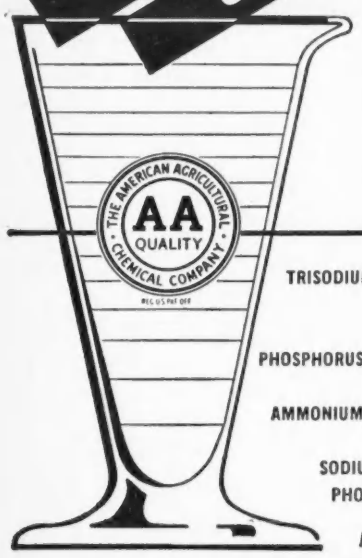

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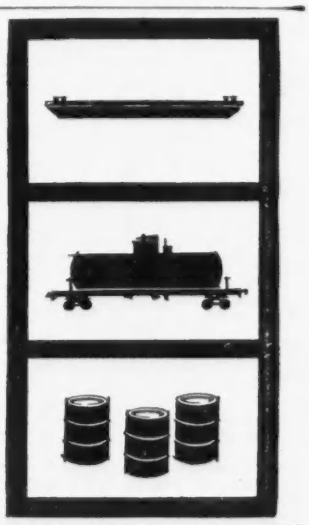

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	Type & Name	Usage	Potency (in U.S.P. units per gram)	Additive	Stability	Mesh Size
LIQUID TYPES	**P1MO Vitamin A palmitate *(liquid)***	In tablets, aqueous dispersions, capsulated products	1,000,000	Edible oil only, for standardization	Excellent	—
	P1MO/BHA Vitamin A palmitate *(liquid)*	as above	1,000,000	Edible oil plus antioxidant (butylated hydroxy-anisole). Note 1.	Excellent	—
	P1.3 Vitamin A palmitate *(liquid)*	For oil-free prepara-tions	1,350,000 to 1,450,000	None	Excellent	—
	A1MO Vitamin A acetate *(liquid)*	In oil solutions and gelatin capsules	1,000,000	Edible oil only, for standardization	Excellent	—
SPECIAL	**Type P1.8 *(liquid)* Vitamin A palmitate**	For research and special production	1,650,000 to 1,800,000	None	Needs special handling	—
	Type A2.9 *(crystalline)* Vitamin A acetate		2,800,000 to 2,900,000	None	Needs special handling	—
DRY TYPES	**Type 325A-32.5D Vitamin A acetate & Vitamin D_2 *(dry)***	For tablets, capsules, vitamin-fortified powdered supplements	A—325,000 D-—32,500	None	Excellent	40 and 60
	Type 325 Vitamin A *(dry)*		325,000	None	Excellent	40 and 60
	Type 500 *(dry)* Vitamin A acetate	For dry prepara-tions: tablets, capsules, vitamin-fortified powdered supplements	500,000	None	Excellent	40 and 60
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Reprints of these data in 8¾" x 11" size are available on request. These can be used in the new Roche loose-leaf catalog, or in any standard 3-ring binder.

Oil, Paint and Drug Reporter

Vol. 170 No. 21 30 Church St., New York 7, N. Y. November 19, 1956

AID TO V-C PRESIDENT: Alfred J. Dickinson, vice-president of Virginia-Carolina Chemical Corporation, Richmond, Va., who has been named to the additional post of assistant to the president of the concern.

CSC, Columbia Gas Study Petrochemicals

J. Albert Woods, president of Commercial Solvents Corporation, and George S. Young, president of Columbia Gas System, Inc., both of New York, have announced an agreement between the two companies to proceed with engineering and economic studies of a proposed joint project to produce petrochemicals.

The $40 million to $50 million project, which would be located in the Ohio Valley area, has been under investigation during recent months by the two companies. Tentative plans call for the commencement of construction in early 1957 after necessary regulatory authorizations have been obtained.

The long range plans for the project provide for the formation of a jointly-owned company and recognize the possibility that the new company may ultimately be engaged in the entire field of ethylene and other hydrocarbon derivatives.

The joint project is based on the utilization of hydrocarbons to be extracted from the reserves of natural gas owned or controlled by Columbia Gas in the Appalachian area and will draw upon the technological and chemical marketing experience of Commercial Solvents.

Aluminum Sulfate Works Planned by Dixon Chemical

Dixon Chemical & Research, Inc., Clifton, N. J., plans to build a new $750,000 aluminum sulfate plant at Port Newark, N. J., next year.

This disclosure was made last week by Arthur W. Dixon, jr., president of the firm, before some 600 persons at the official opening of Dixon Chemical's new $2,500,000 sulfuric acid installation.

The acid facility is the first step in a $5 million expansion program planned by Dixon Chemical. The aluminum sulfate plant, according to Mr. Dixon, will be compatible with the sulfuric operation.

Next month construction will start on a research and development laboratory building. The $150,000 structure, which will include general offices, will serve as headquarters for the entire company.

Schering Lab Nearly Ready

Work is nearing completion on the 1.5 million dollar biological research building of Schering Corporation, at Union, N. J. Two additional buildings, a pilot production plant and a sterile products building, are also nearing completion at the Union location.

Paint Manufacturers Warned To Be Alert for 'Danger Sign' Amid Record Sales Figures

NPVLA Convention Report

Although dollar sales are likely to set a new record again this year, the paint industry should be alert to the presence of an ominous "danger sign" on the business horizon. This warning was voiced last week by Joseph F. Battley, president of the National Paint, Varnish and Lacquer Association, at NPVLA'S annual convention in Los Angeles. He noted that hand-in-hand with the rise in paint sales—for three quarters a gain of 1 percent over 1955—has come a decline in production volume.

Joseph F. Battley

Putting Figures in Perspective

"In perspective," Mr. Battley pointed out to the paint makers, "you must recognize these points from any sales figure. First, while your total sales may be at the highest point in your history, you are practically standing still when comparative trends show your markets are being lost to other industries.

"Second, don't dismiss a drop in your sales as due to our traditional, seasonal trend. That is no excuse any more, with our modern paint products. Finally, we all know that our sales dollar business has increased very appreciably.

"We have, therefore, the assurance of another new sales dollar record year for 1956. But that record of sales dollars—comparatively speaking—will not mean you are progressing unless we can also change these facts."

These are the facts Mr. Battley thinks need changing:

- In 1947 paint sales represented a half of 1 percent of the gross national product.
- Last year paint sales dropped to four-tenths of 1 percent.

In the view of the NPVLA president, this drop clearly indicates the extent of the potential markets the paint industry has lost.

"We must stop pitting paints against paints and start to compete against those products replacing ours in homes and other products," Mr. Battley declared.

One way to increase paint sales is via advertising, suggested Alfred A. Whittaker, vice-president of Benton & Bowles, Inc., New York advertising agency.

However, he pointed out that it's becoming much more difficult "to talk above the general noise level of advertising and

—Continued on page 60

Metal & Thermit Purchases Ground for Kentucky Plant

Metal & Thermit Corporation, New York, has purchased a 163-acre site near Carrollton, Ky., and will soon begin construction of a chemical processing plant.

Negotiations for the land were conducted with the assistance of the Texas Gas Transmission Corporation and the State Department of Economic Development.

The initial development will cover ten acres, and will include production buildings, an office building, a warehouse and a steam plant, as well as other structures.

The plant will produce organotin compounds, color stabilizers for plastic formulations, and other tin chemicals for pharmaceutical and other industries.

Heyden, Newport Boards Back Merger

Heyden Chemical Corporation, New York, will acquire the assets of Newport Industries, Inc., also New York, and the name of Heyden will be changed to Heyden Newport Chemical Corporation, the directors of both companies announced last week following the completion of merger talks.

The plan, which now goes to the stockholders of both companies for approval on December 27, calls for the exchange of common stock on the basis of one and one-half shares of Heyden for one share of Newport and the assumption of Newport's liabilities by Heyden.

The announcement was made jointly by Simon Askin, president of Heyden, and Armin A. Schlesinger, chairman of the

—Continued on page 42

Prentiss Drug Acquires Sales Rights to Deodorant

Prentiss Drug & Chemical Company, New York, has acquired exclusive sales rights to "Meelium" deodorant. "Meelium" is said to be one of the first true deodorants offered to aerosol fillers.

Prentiss will offer "Meelium" to the aerosol filling trade in the form of a concentrate. For aerosol use the concentrated "Meelium" is diluted with deodorized kerosene.

Warner-Lambert Slated to Acquire Nepera, Anahist

Warner - Lambert Pharmaceutical Company, New York, and Nepera Chemical Company, Yonkers, N. Y., have reached agreement for the acquisition by Warner-Lambert of the entire capital stock of Nepera from members of the Lasdon family, and the remaining stock interest in a majority-owned subsidiary of Nepera.

The acquisition will be by the exchange, for all of the Nepera stock, of 178,079 Warner-Lambert common shares and 70,702 shares of $100 per value $4.50 cumulative preferred stock.

A special meeting of Warner-Lambert stockholders of record as of today's date has been called for December 12, to authorize the preferred stock issuable in the transaction, and to increase the number of authorized common shares for this purpose and possible future corporate requirements.

What Nepera Chemical Makes

Nepera produces, in its manufacturing plant at Harriman, N. Y., a variety of ethical specialties, as well as a number of bulk fine chemicals, and intermediates which are employed by Nepera in manufacturing other products and for sale to the pharmaceutical industry.

A subsidiary, Anahist Company, markets the "Anahist" and "Super Anahist" cold remedies.

It was indicated that Nepera had a consolidated net worth of $9.5 million on May 31, and that its consolidated net income amounted to substantially $1.3 million for the calendar year 1955. Nepera's net profits for 1956 are expected to exceed those for last year.

Acquisition of Nepera will broaden Warner-Lambert's product base in the ethical pharmaceutical field in this country as well as overseas, and add the rapidly growing "Anahist" and "Super Anahist" cold remedies to its proprietary products. This acquisition will also serve the company's needs for a well integrated manufacturing operation to supply the basic ingredients utilized in some of its products and fine chemicals for sale to other companies, it was pointed out.

William S. Lasdon will become a director of Warner-Lambert and a member of its executive committee. Stanley S. Lasdon will also become a director of Warner-Lambert and vice-president of the company, and Milton S. Lasdon will become vice-president of the company and president of its Nepera division.

Indiana Standard Plans Phthalic Compound Facility

Standard Oil Company (Indiana), Chicago, plans to build a plant in the midwest for manufacture of phthalic anhydride, isophthalates, terephthalates and benzoic acid, with a capacity of about 60 million pounds annually.

The facility, to be built and operated by Amoco Chemicals Corporation, a Standard Oil affiliate, will employ a hydrocarbon oxidation process in which Standard acquired an interest in 1955.

Specific products slated to be made at the proposed plant include phthalic anhydride, isophthalic acid, terephthalic acid, dimethyl terephthalate, dimethyl isophthalate, and benzoic acid.

Reichhold Chemicals Goes on Big Board

Reichhold Chemicals, Inc., White Plains, N. Y., last week offered 200,000 shares of common stock for sale at a price of $22.50 per share. This represents the first public offering of the company's stock since it was founded.

The company intends to use the funds from the sale of the securities for expansion (See OPD, 11/12/56). Since its incorporation in 1930, Reichhold has paid no cash dividends on its stock with the exception of one in 1936.

However, after the current stock sale the company intends to declare quarterly dividends of 15 cents in cash and 1 percent in stock on each share of common.

Treasury Invites Comment on Proposed Tariff Cuts

The Treasury Department last week invited comments from industry on the items that should be included on the so-called preliminary list of articles imported into the United States whose valuations for tariff purposes might be reduced 5 percent or more under the change in the customs law passed by congress last session.

In a bitterly fought amendment to customs procedures, congress last session provided that in the future all ad valorem tariffs, with certain exceptions, are to be levied on a single valuation basis—export value rather than the higher of foreign value or export value.

In order to meet the protests registered by the chemical industry and others, it was provided that this rule shall not apply where it means a reduction in the valuation basis of 5 percent or more.

In putting the new rule into effect, the law directs the department to draw up a list of the articles whose values would be reduced by 5 percent or more by the single valuation rule, and make this list public.

This is to be a preliminary list and any articles on the list shall continue to be valued on the old basis. After study and investigation, the list in revised form is to be reissued.

The department is now in the process of preparing the preliminary list and will give consideration to any relevant views as to why particular articles should or should not appear on the list. This will be the only opportunity for interested parties to bring their views to the attenion of the department prior to the publication of the preliminary list.

To assure that the views will receive attention, the department asked that they be submitted in writing to the Bureau of Customs within sixty days.

Europe, Middle East Called Equally Dependent on Oil, Trade

Western Europe is dependent on oil from the Middle East but the Middle East is as dependent on the West for markets, Secretary of the Interior Fred A. Seaton told the American Petroleum Institute's meeting in Chicago last week. As a result, Mr. Seaton said, the basic hope for peace in the Middle East lies in that "mutuality of interests." Mr. Seaton pointed out that the foreseeable oil needs of the world will become greater and that the oil "must come from every region of the world—a major portion from the Middle East, so far as we now know."

"It is of the utmost importance that Middle East oil continue to be available in the world markets. That simply means it is important too that the United States continue its efforts for peace and assist in maintaining production and exploration in the Middle East," Mr. Seaton said.

Oil, Trade Necessary

"Western Europe is desperately dependent upon oil and trade with the Middle East. We know, by bitter and repeated experience, that any decline in the level of economic activity in Western Europe soon reflects itself in the United States and Canada.

"Western Europe will face disaster if Middle East oil is permanently cut off.

"There is, however, another side to all this," he stated.

"The countries of the Middle East, even though they have this oil, not only will slip back in their economy but also give up opportunity for improvement in their standards of living unless they can market it. Those countries know their oil resources are valueless unless they have available the great markets of the West.

"In this mutuality of interests lies one of the basic hopes for peace in that area.

"Insuring an adequate supply of petroleum is a matter of major concern," Mr. Seaton went on. "Military operations are powered almost entirely by oil and essential supporting civilian services simply bog down if adequate supplies are not available. I realize that many of you are convinced that the domestic petroleum industry, if relieved of the competition of

—Continued on page 43

ASSISTANT SALES MANAGER: George A. Petrie, promoted to assistant sales manager of Warwick Wax Company, subsidiary of Sun Chemical Corporation, Long Island City, N. Y.

Boggs Subcommittee Foreign Hearings Set

The Boggs subcommittee of the house ways and means committee studying foreign trade and tariff policies last week announced plans to resume its inquiry abroad, with hearings scheduled both in Europe and Asia.

The Far Eastern group has already embarked for Japan where it will spend three days, December 4, 5 and 6, in a detailed study of Japanese-American trade matters. The European group will open its work in Rome November 26 and proceed thereafter to France, United King-

—Continued on page 75

Ferrocerium Tariff Plea Is Rejected by President

Recommendations of the Tariff Commission that existing tariff rates on imports of ferrocerium (lighter flints) and other cerium alloys be doubled to reduce the threat of injury to the domestic industry were rejected last week by President Eisenhower. The present duty is $1 a pound plus 12½ percent advalorem.

The President said that it did not appear to him "that imports of lighter flints have, as the law provides, 'contributed sub-

—Continued on page 75

Calcium Phosphate Prices To Be Advanced by Victor

Victor Chemical Works, Chicago, has announced increases in price for monocalcium and tricalcium phosphates, to go into effect on spot and contract January 1.

Effective January 1, anhydrous monocalcium phosphate will be advanced to $9.20 per 100 pounds, bags, carlots or truckloads, f.o.b. works, freight equalized, and $9.75 per 100 pounds, less carlots and less truckloads, same basis, an increase of 30 cents per 100 pounds.

Hydrated monobasic calcium phosphate will rise to $7.20 per 100 pounds, bags, 10,000-pound lots, freight equalized, and $7.70 per 100 pounds, smaller quantities, same basis, up 30 cents.

Tribasic precipitated NF calcium phosphate will be advanced to $9.25 per 100 pounds, bags, carlots or truckloads, f.o.b. works, freight equalized, and $10 per 100 pounds, smaller quantities, same basis, up 50 cents per 100 pounds.

The Week's Price Changes

Ferric-Ammonium Citrate, Peanut and Soybean Oils Advance. Sodium Lauryl Sulfate, Orthocresol and Casein Are Lower.

Prices Advanced

Acid, linseed, 3 10c. per lb. (p. 72).
Casein, imp., Arg., ½c. per lb. (p. 68).
o-Cresol, m.p. over 30°C, ½c. per lb. (p. 50).
Cocoa butter, 2c. per lb. (p. 72).
Egg yolk, 4c. per lb. (p. 44).
Ferric-ammonium citrate, brown pearls, 5c. per lb. (p. 53).
green pearls, 5c. per lb.
Greases, ⅛c. to ¼c. per lb. (p. 72).
Lard, cash, 1½c. per lb. (p. 72).
Linseed meal, $1 per ton (p. 72).
Oil, castor, dom., 1c. to 1½c. per lb. (p. 72).
No. 1, Braz., 1c. per lb.
Coconut, crude, ¼c. per lb. (p. 72).
Corn, crude, ¼c. per lb (p. 72).
refd., ¼c. per lb.
Cottonseed, crude, ¼c. per lb. (p. 72).
refd., ¼c. per lb.
Linseed, 3 10c. per lb. (p. 72).
Olive, 5c. per gal. (p. 72).
Oiticica, ¼c. per lb. (p. 72).
Palmarosa, 75c. per lb. (p. 58).
Peanut, crude, 1½c. per lb. (p. 72).
refd., 1½c. per lb.
Oil, rapeseed, ½c. per lb. (p. 72).
Rice bran, ½c. per lb. (p. 72).
Soybean, crude, ½c. per lb. (p. 72).
refd., ½c. per lb.
Tung, ½c. per lb. (p. 72).
Wormwood, 35c. per lb. (p. 58).
Tin, ½c. per lb. (p. 36).

Prices Reduced

Egg albumin, flake, 1c. per lb. (p. 44).
Sodium lauryl sulfate, ½c. per lb. (p. 45).
Stannic oxide, 5c. per lb. (p. 36).
Tallow, ⅛c. to ¼c. per lb. (p. 72).

OPD Price Index

THE OIL, PAINT AND DRUG REPORTER'S relative record of prices of chemicals and related materials is currently as follows:—

(100=1949 average)

Nov. 16, 1956	Nov. 9, 1956	Nov. 18, 1955
109.53	109.48	107.06

Amoco Chemicals Nears Reality

Amoco Chemicals Corporation last week took another step toward reality with the appointment of John J. O'Connell as marketing vice-president. Amoco Chemicals will be formed before the end of the year through consolidation of three chemical affiliates of Standard Oil Company (Indiana), Chicago. Mr. O'Connell has joined the Chicago offices of Jay H. Forrester, Amoco Chemicals' president-elect. Dr. John W. Bertetti, who will be vice-president in charge of manufacturing, has also joined the Chicago office.

Mr. O'Connell has been manager of the solvents department of Shell Chemical Corporation, New York, since 1946. Prior to World War II, he was with American Cyanamid Company, New York.

The past year, Mr. O'Connell also organized and taught as a lecturer at Columbia University, the first course in commercial chemical development given in the United States.

Dr. Bertetti since 1952 has been general manager of manufacturing and since 1954 a director of Pan-Am Southern Corporation, an Indiana Standard affiliate, at New Orleans, La.

He joined the Standard Oil research department at Whiting, Ind., in 1934 and in 1936 transferred to Pan American Refining Corporation at Texas City, Tex., where he became a research group leader.

In 1942 Dr. Bertetti became associated with Root Petroleum Company, and in 1950 shortly after it became part of Pan-Am Southern, he was promoted to refinery manager at El Dorado, Ark. He transferred to New Orleans in 1951, and until 1952 was assistant general manager of manufacturing.

John J. O'Connell

V-C Appoints Buyer

Virginia-Carolina Chemical Corporation, Richmond, Va., has appointed Douglas W. Laird manager of its purchasing department. Robert R. Martin has been named assistant manager of the department. Mr. Laird joined V-C in 1948 and had been assistant manager of its purchasing department since 1954.

Ferrophosphorus Rise Is Scheduled by Monsanto

An increase of $10 per gross ton in the price of ferrophosphorus, effective January 1, has been announced by Monsanto Chemical Company's inorganic chemicals division, St. Louis, Mo.

This brings the price of lump size ferrophosphorus in carload quantities to $110 per gross ton. Other sizes and quantities of the material also are to be increased $10 per gross ton.

Index to News and Market Reports

Association News

ADMA to Meet in West 55
Chemical Buyers Set Dates 7
DCAT to Hear Former HEW Head 75
Europe, Middle East Dependence Cited .. 4
Health News Institute Organizes 59
Paint Manufacturers Warned on Lost Mkts. 3
Philadelphia Chemists Plan Party 37
Research Stressed at Chemical Conference 5
Wholesale Drug Automation in Vogue .. 7

Government News

Antitrust International Aspects Broaden. 5
Boggs Subcommittee Hearings Set 4
Copper Scrap Quota Raised 48
Ferrocerium Tariff Plea Rejected 4
Mineral Resources Rules Issued 37
Renegotiation Rules Finalized 7
Treasury Asks Tariff Cut Comments 3
Water Polluters Faced with Action 43

Industry News

"Albamycin" Test Shows Potency 47
Amoco Chemicals Nears Reality 4
Calcium Phosphate Prices Going Up 4
CSC, Columbia to Study Petrochemicals. 3
Dixon Projects Aluminum Plant 3
DuPont to Do Heavy Water Research ... 7
Epoxy Compound Available 57
Ferrophosphorus Rise Scheduled 4
Fertilizers Set for Big Output 7
FMC Plans to Buy Company 43
Glass Containers at Peak in '57 7
Heyden, Newport Merger Set 3
Ind. Standard to Build Phthalic Plant 3
Jefferson Begins Expansion 5
Little to Expand 5
Metal & Thermit Buys Plant Site 3
Petrochemicals Seen Ahead of Industry. 7
Phosphorous Furnace Runs 4 Years 52
Polystyrene Beads Unit Planned 5
Prentiss Drug Gets Sales Rights 3
Reichhold Chemicals Offers Stock 3
Respiratory Vaccine Effective 57
Schering Lab to Be Complete January 1. 3
Sylvania, Corning Propose Atomics Firm. 5
Tanning Items Developed 5
Zirconium Corp. Names Sargent 5

International News

Aluminium Ltd. Plans African Facility .. 5
India Producing Blue, Green Dyes 59
Nat'l Tungsten Gets Chile Rights 5
Pakistan Fertilizer Output Lags 55
Salk Exports Exceed Half of Quota 47
Socony, Sonneborn Transaction Set 59
Synthetic Paraffin Due from Africa 5

Personnel News

Davison Names Sales Manager 7
Dow Posts to Grant, Day 5
Electromet Picks Manager 48
GE Names Market Research Head 7
Olin Mathieson Names Aluminum Head. 37
Quaker State Manager Retires 37
Virginia-Carolina Names Dickinson 3
Virginia-Carolina Names Laird 4
Warner-Lambert Opens Facility 5
Warner-Lambert to Acquire Two Firms. 3
Warwick Wax Names Petrie 4

Market Reports

Acids 36
Agricultural Chemicals 49
Aliphatic Organics 45
Aromatic Chemicals 58
Botanical Drugs, Gums 53
Coal Chemicals 50
Coatings Materials 68
Drugs 53
Essential Oils 58
Fats and Greases 72
Fertilizer Materials 49
Fine Chemicals 53
Heavy Chemicals 36
Industrial Organic Chemicals 45
Lacquer Materials 68
Leather Chemicals 44
Naval Stores 68
Oil Cake and Meal 72
Oils 72
Paint Materials 68
Pesticides 49
Petrochemicals 45
Petroleum Derivatives 71
Protective Coatings Materials 68
Spices 58
Textile Chemicals 44
Waxes 72

General Features

Advertisers Index 79
Association Meeting Dates 7
Bids Wanted 48
Classified Advertisements 78
Consulting Chemists and Engineers 74
Coal Chemical Output 50
Crude Oil Stocks 71
Current Market Quotations 9
Editorials 34
Imports 56
Jobs & People 39
Obituaries 70
OPD Price Index 4
Washington Talks It Over 34

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IN KEY DOW CHEMICAL SALES POSTS: Leo B. Grant (left), manager of Dow Chemical Company's New York office since 1949, who on January 1 will take over the newly-created post of chemicals department sales manager, with headquarters in Midland, Mich., and James Day (right), supervisor of chemical sales in the New York office, who will succeed Mr. Grant on that date.

Antitrust International Aspects Broaden with High Court Ruling

In a ruling greatly broadening the government's authority to deal with the international aspects of antitrust violations, the Supreme Court of the United States last week held that American companies can be required to compete in foreign markets. The ruling was handed down in an antitrust action brought by the government against Holophane Company, manufacturer of prismatic glassware. The lower court found that the company unlawfully divided up world markets with the two competing companies and ordered it to start competing with them.

No Formal Opinion Handed Down

No formal opinion was handed down by the supreme court which unanimously agreed that Holophane violated the antitrust law in entering into an agreement dividing world markets, and divided equally four to four on the question whether Holophane could be required to compete in the foreign market. A tie vote sustains a lower court ruling which, in this case, was that the company must compete.

This part of the ruling had been strongly contested by the company on the grounds that it was being forced to perform affirmative acts which violate agreements which, though unlawful in the United States, are lawful abroad.

Foreign courts may not recognize the decree of a US court and if the company enters the foreign market it may lay itself open to damage suits, it was argued.

In its ruling, the lower court instructed Holophane to use reasonable efforts to sell its products in competition with the other two companies and suggested that it change its trademarks and tradenames to avoid violating the rights of the foreign companies.

Polystyrene Beads Plant Is Projected by Koppers

Koppers Company, Pittsburgh, Pa., has announced plans to build a full-scale commercial plant for the production of expandable polystyrene beads.

The new facilities will be constructed at the Kobuta, Pa., operation where the material has been produced in semi-commercial quantities since Koppers first announced its availability more than two years ago. Koppers expects to be the first in the country to produce expandable polystyrene in commercial quantities. Plans call for full-scale operation in early 1958.

Synthetic Paraffin Due in From Africa

The first quantity shipment of synthetic paraffin to be imported from South Africa will arrive in New York early in December aboard the Robin Line's S. S. Robin Kirk, according to Moore & Munger, New York, marketers of industrial waxes and clays.

An exceptionally hard high-melting point of hydrocarbon wax, it is one of the primary products of a South African government program to produce petroleum from low-grade coal by the Fischer-Tropsch process of synthesization. Produced by South African Coal, Oil & Gas Company (SASOL), the synthetic paraffin is distributed exclusively in the United States by Moore & Munger under the name of "Paraflint."

Potentially available in large quantities at low cost, the synthetic wax is expected by Moore & Munger to find widespread acceptance by polish manufacturers who are faced with many problems in the use of natural waxes, including price fluctua-

—Continued on page 52

Warner-Lambert Di is on Opens Lititz, Pa., Facility

Warner-Lambert Pharmaceutical Company, Morris Plains, N. J., has formally opened a multi-million-dollar plant at Lititz, Pa., to house its Lambert-Hudnut division. Twenty-one products, including such nationally-known ones as "Listerine" and "Quick," will be manufactured in the plant.

Three-hundred and fifty men and women are already employed in the Lambert Hudnut plant and this is expected to increase to 750 in another year or two. Ninety percent of the working force has been recruited from the local area.

Most of the operations of the new plant were formerly conducted in a loft building in Manhattan which had become obsolete and inefficient.

Chemical Men Told Research Must Be Given Willing Support For Business to Keep Growing

The chemical industry was told last week that there must be a greater willingness on the part of business to support research if it wants to grow. Dr. Neil H. Borden, professor of advertising at Harvard Business School, addressing a meeting of the Chemical Market Research Association in Boston, stressed the importance of experimenting with new ideas, but urged the exercise of good judgment in their adoption. He said that despite great strides in the past thirty years, industry still has not gone far in making a science out of market research.

Speaking at a meeting geared to acquaint CMRA with new technics of research on a broad scale, Dr. Borden pointed out that as business grows larger and more complex there is an increasing need for facts and reliable prediction.

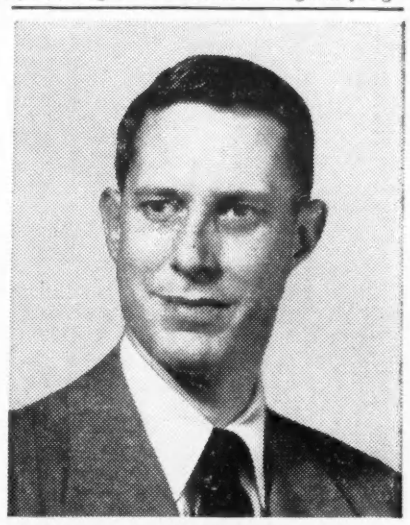
Tendency to Fear New Methods

Dr. Claude Robinson, president of Opinion Research Corporation, in discussing advertising and communication research, cited the fact that today there is a tendency to deny the future and fear new methods. Industry must accept progress, he said, and adopt new methods of proven worth.

Dr. Robinson went on to enumerate and illustrate the various approaches to industrial advertising, commenting on each, and pointing out the methods which promise the greatest profit. He continually emphasized the effectiveness of advertising as a vehicle for research.

In speaking on motivation research, Dr. Burleigh B. Gardner, executive director of Social Research, Inc., stressed the importance of creating an emotional climate in the mind of a customer to pave the way for the salesman. As an illustration he cited the chemical industry where several companies may sell identical items. The larger companies, he said, would usually get the business even if they had higher prices because their names are better known to the customer.

Bay E. Estes, manager of the commercial research department of United States Steel Corporation, told the group that inventory statistics have been used as a method for determining future market activity, and described his company's method for measuring steel inventories. Its chief use is in forecasting for a relatively short period ahead, he said, and could be adapted to large volume heavy chemicals whose markets are not subjected to rapid change.



ZIRCONIUM CORP. PRESIDENT: E. C. Sargent, appointed president of the Zirconium Corporation of America, Solon, Ohio, succeeding N. V. Coyle who remains as board chairman.

African Alumina Complex Slated by Aluminium, Ltd.

Development of a bauxite and alumina complex in French West Africa at the cost of $100 million is planned by Aluminium, Ltd., Montreal, Canada, and a French subsidiary, Bauxite du Midi.

The new industry will be located about 345 miles southeast of Dakar and 185 miles northeast of Conakry in an undeveloped region of French Guinea in the Boke region.

Plans call for construction of a chemical works with a capacity of 250,000 tons of alumina per year, construction of a railroad to the Atlantic coast, and establishment of storage facilities at the mouth of the Rio Nunex River.

Aluminium says that consiruction of the complex should start in 1957 if the various steps and formalities can be concluded satisfactorily—then bauxite could be shipped in 1960, and alumina in 1961.

Tanning Items Developed

Two chemicals for use in the production of white-tanned leather have been developed by Rohm & Haas Company, Philadelphia. They are "Zircotan S," a sodium zirconium silicate, and "Leukanol C," a condensed phenolic syntan.

Jefferson Beginning Petrochem Expansion

A major expansion of its petrochemicals plant at Port Neches, Tex., has been started by Jefferson Chemical Company, Houston, Tex., it has been announced by George R. Bryant, president. The program is by far the largest undertaken by the company since its formation in 1944.

The expansion will increase production facilities for existing products, provide installations for the production of various raw materials now being purchased, and lead to the manufacture of several new products.

Specifically, Mr. Bryant said that Jefferson's expansion will:

• Triple production facilities for ethylene, used by the company as a starting

—Continued on page 74

National Tungsten Gets Rights to Deposit in Chile

Rights to one of the free world's largest deposits of strategic minerals have been acquired by the National Tungsten Corporation, Los Angeles.

Involved are tungsten, mercury, and manganese deposits west of the Andes Mountains in northern Chile, with an estimated value, at current market prices, of over 1.5 billion dollars. Engineering reports estimate the overall size of the ore bodies exceeds 75 million tons.

Signing of an agreement giving National

—Continued on page 74

Arthur D. Little, Inc. To Expand Facilities

Arthur D. Little, Inc., Cambridge, Mass., has bought 170 acres in Concord, Mass., and plans to build facilities for Nuclear Metals, Inc., an affiliate.

At the same time, the company has announced plans to increase its facilities at Acorn Park, in West Cambridge, by building an addition to house its flavor laboratory and the chemical and metallurgical engineering division.

A new building will be constructed at West Cambridge to contain a number of other activities, including technical economics and operations research.

Sylvania, Corning Propose Atomic Energy Firm

Sylvania Electric Products, Inc., New York, and Corning Glass Works, Corning, N. Y., have announced a proposal to form a jointly-owned company for the purpose of expanded research development, and production activities in the atomic energy field.

It was said that the new organization, to be known as Sylvania-Corning Nuclear Corporation, will be incorporated in Delaware and that Sylvania and Corning will each own one-half of the stock.

"This joint enterprise will represent an extremely significant step in the continued development of the atomic energy industry and the advent of large-scale atomic power," officials commented.

"The new organization will take over the two companies' atomic energy businesses, thus acquiring Sylvania's extensive background in metallurgy and Corning's leadership in ceramics. The availability of both these major technical skills is expected to open up new opportunities in the nuclear field."

A major producer of electrical and electronic products, Sylvania entered the atomic energy field ten years ago, with particular emphasis on metallurgical research and development.

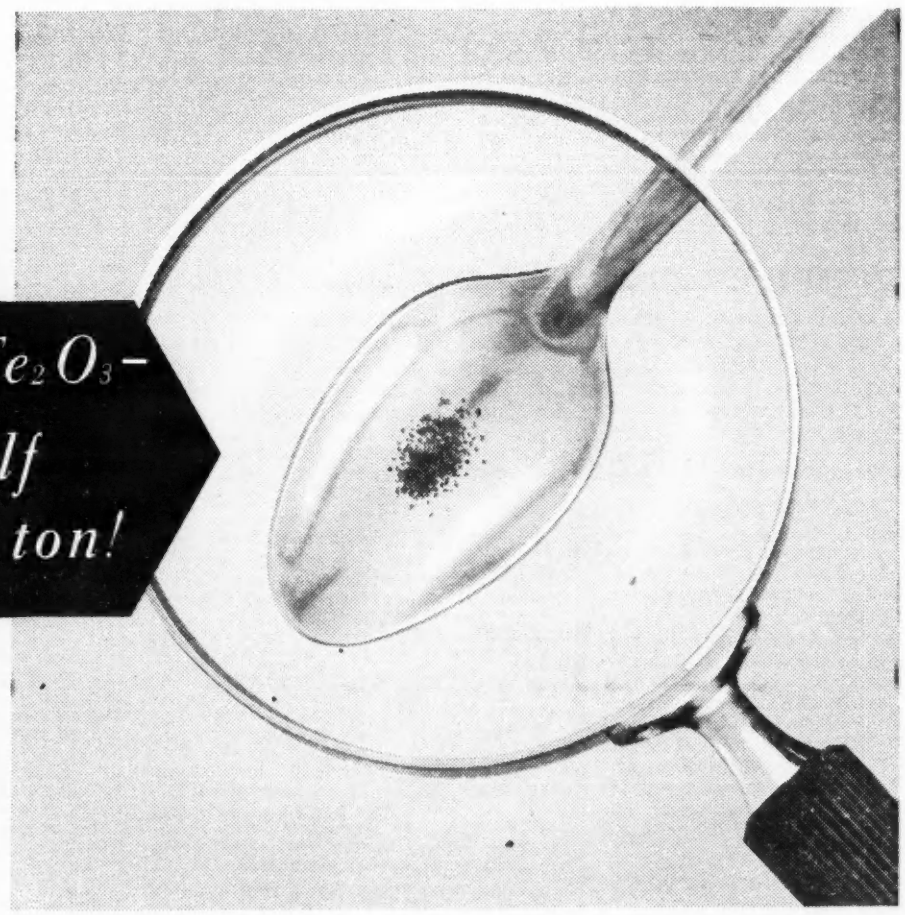
The company's atomic energy division is one of the leaders in the development and fabrication of fuels for atomic reactors, reactor components, and materials.

Corning is recognized as a leader in the development and manufacture of glass and refractory products for many applications throughout industry. The company is engaged in applying high-temperature ceramic technics to the manufacture of nuclear fuel elements and related components.

Westvaco®

SODA ASH... *better because*

only this much Fe_2O_3–
Less than one-half
of an ounce in a ton!



Chemical usage-WESTVACO Soda Ash produces clear, colorless solutions. There's never any iron discoloration in finished products.

Other impurities are at the minimum, too. WESTVACO Soda Ash is absolutely free of corrosive ammonia, contains only a trace of salt, sulfate and calcium. Boron content less than 8 ppm., heavy metals 3 ppm. Exceptional purity gives you more Na_2CO_3 for your money! Write your nearest WESTVACO office for quotation.

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Westvaco Chlor-Alkali Division
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fmc FOOD MACHINERY AND CHEMICAL CORPORATION

FMC CHEMICALS INCLUDE: BECCO *Peroxygen Chemicals* · WESTVACO *Alkalis, Chlorinated Chemicals and Carbon Bisulfide* · NIAGARA *Insecticides, Fungicides and Industrial Sulphur* · OHIO-APEX *Plasticizers and Chemicals* · FAIRFIELD *Pesticide Compounds and Organic Chemicals* · WESTVACO *Phosphates, Barium and Magnesium Chemicals*

Association Meetings

Manufacturing Chemists' Association, winter conference, Statler hotel, New York, November 20.

Air Pollution Control Association, semi-annual meeting, Rice hotel, Houston, Tex., December 3-5.

American Drug Manufacturers Association, annual meeting, El Mirador hotel, Palm Springs, Calif., April 22-25.

American Institute of Chemical Engineers, annual meeting, Statler hotel, Boston, December 9-12.

American Pharmaceutical Manufacturers' Association, midyear and eastern section meeting, Waldorf-Astoria hotel, New York, December 10-12; central section meeting, Edgewater Beach hotel, Chicago, February 11-13; western section meeting, Ambassador hotel, Los Angeles, February 18-19.

Association of American Soap and Glycerine Producers, annual convention, Waldorf-Astoria hotel, New York, January 23-25.

Chemical Bureau Alumni Association, fall get-together, Washington hotel, Washington, D. C., November 29.

Chemical Buyers' Group, National Association of Purchasing Agents, mid-winter meeting, western division, Congress hotel, Chicago, January 24; eastern meeting, Commodore hotel, New York, January 29.

Chemical Market Research Association, Sheraton hotel, Philadelphia, February 19-20.

Chemical Specialties Manufacturers Association, annual meeting, Mayflower hotel, Washington, D. C., December 3-5.

Commercial Chemical Development Association, plastics meeting, Statler hotel, New York, March 27-28; resort meeting, French Lick, Ind., May 13-14.

Drug, Chemical and Allied Trades section, New York Board of Trade, annual fall luncheon, Waldorf-Astoria hotel, New York, November 29.

National Agricultural Chemicals Association, spring meeting, Fairmont hotel, San Francisco, March 6-8.

National Chemical Exposition, Public Auditorium, Cleveland, Ohio, November 27-30.

National Drug Trade Conference, annual meeting, Gramercy Park hotel, New York, December 3.

National Foreign Trade Council, annual convention, Waldorf - Astoria, New York, November 26-28.

National Industrial Conference Board, fifth conference on atomic energy, Benjamin Franklin hotel, Convention Hall, Philadelphia, March 14-15.

National Plant Food Council, annual meeting, Greenbrier hotel, White Sulphur Springs, W. Va., June 9-13.

Nuclear Congress, Convention Hall, Philadelphia, March 11-15.

Pittsburgh Conference on Analytical Chemistry and Applied Spectroscopy, Penn-Sheraton hotel, Pittsburgh, Pa., March 4-8.

Proprietary Association, scientific section, winter meeting, Waldorf-Astoria hotel, New York, December 11.

Salesmen's Association of the American Chemical Industry, Christmas party, Waldorf-Astoria hotel, New York, December 12.

Society of Plastics Engineers, annual technical conference, Sheraton-Jefferson hotel, St. Louis, Mo., January 16-18.

Society of Plastics Industry, annual conference and Pacific Coast plastics exposition, Shrine Exposition Hall, Los Angeles, March 18-21.

Synthetic Organic Chemical Manufacturers Association, annual meeting and dinner, Biltmore hotel, New York, December 3.

Toilet Goods Association, scientific section, Waldorf-Astoria hotel, New York, December 12.

Wholesale Drug Business Applying Automation to Handle Order-Filling

New automation devices are now going into the wholesale drug business for order-filling and clerical operations, as part of the application of electronic punched-card equipment, James E. Allen, president of the National Wholesale Druggists' Association, declared last week at the group's eighty-second annual convention in Hollywood, Fla. Mr. Allen further disclosed that large sales gains have been made during the past year with the successful application of new merchandising services which, he said, have helped produce more than 25 percent more sales on the average for a retail drug store immediately after being put into effect.

MARKET RESEARCH HEAD: Dr. John M. Tome, appointed to direct market research and product planning for General Electric Company's chemical materials department at Pittsfield, Mass.

Mr. Allen cited the "self-selector" as a "typical unit" which he said has boosted store sales an average of $18 a day at a cost to the druggist of only $1 a day.

The speaker said that in continuing to project new solutions of general store management problems "we are all working for the consumer."

He then pointed to the industry's latest merchandising program, which he said was helping the druggist to "keep abreast of the revolutionary changes in the pharmaceutical field."

Mr. Allen outlined a "P.S." package to help stimulate retail drug store sales

—*Continued on page 73*

Glass Containers Seen at Peak in '57

An all-time high in glass container shipments in 1957 was predicted last week by C. C. Merrifield, president of Econometric Institute, Inc., before the Glass Container Manufacturers Institute meeting in Phoenix, Ariz.

Mr. Merrifield estimated that total glass container shipments in 1957 would total 144 million gross. This amounts to 20,736,000,000 units or 124 per capita. It is an increase of 4 million gross—or 3 percent—over the estimated 1956 total.

"This increase in demand stems mainly from the likelihood that the pattern of successful development of new uses and new markets for glass containers will continue during 1957," Mr. Merrifield said.

"Such growth has been particularly

—*Continued on page 73*

Engineers' Group Chooses Kinzel for 1958 President

The American Institute of Mining, Metallurgical, and Petroleum Engineers has elected Dr. Augustus B. Kinzel president for one year, beginning in February, 1958. Dr. Kinzel is vice-president of Union Carbide & Carbon Corporation, in charge of research.

Carl E. Reistle, jr., vice-president of Humble Oil & Refining Company, is currecently president of the institute. Grover J. Holt, of Ishpeming, Mich., general manager of the ore mining department of Cleveland-Cliffs Iron Company, now president-elect, will become president in 1957, taking office February 26.

Petrochemicals Seen Ahead Of the Entire Chemical Industry In Rapid Rate of Expansion

"The whole chemical industry, and particularly the petrochemical portion of it, will continue to expand at a faster rate than the main body of industry." That is the opinion of John A. Field, vice-president of Carbide & Carbon Chemicals Company, New York, a division of Union Carbide & Carbon Corporation. In fact, Mr. Field says that "growth prospects in the chemical industry are just as good today as they have ever been. The impact of the high research expenditure, the wide diversity of end use and the continuing penetration into established areas all point toward more and more expansion into new fields as well as old."

DAVISON SALES MANAGER: E. Kyle Ruble, named midwestern district sales manager of its industrial chemicals division by Davison Chemical Company, division of W. R. Grace & Co., Baltimore, Md., in which post he will be in charge of a twelve-state area from Ohio to Nebraska.

Presenting his views before the New York Society of Security Analysts in New York during the past fortnight, Mr. Field gave three reasons for the predicted expansion in petrochemicals:

Petrochemicals in Comparative Infancy

"The petrochemical industry is in its comparative infancy when considered beside other major industries in the United States. This very youngness of the petrochemical industry leads to the second reason why its growth will continue to be rapid.

"The rate of discovery as a result of both basic research and application research for petrochemicals is far greater than that in any other industry which supplies raw materials out of which other products can be made. Perhaps I should explain this a little further. If we compare the petrochemical industry to the steel industry, the copper industry, the lumber industry, or the wool industry for example, we notice at once the greater number of new products which is characteristic of the chemical industry.

"Thirdly, the petrochemical industry is an almost incredibly diverse industry and in reality permeates and penetrates almost every other industry."

Pointing out that the basic needs of life are food, clothing, shelter, transportation, communication, recreation and health, Mr. Field said "each of these areas can be classified as an 'industry' if you wish, in much the same way that petrochemicals are loosely classified as an industry." In each of these areas, he added, petrochemicals are playing their part and will continue doing so in the future.

Plastics to Be Made Tough By 'Bombardment' Method

An oil company scientist has predicted that new processes will lead to plastics tough enough for automobile bodies, aircraft and structural members for buildings.

Dr. Harold Gershinowitz, president of Shell Development Company, Emeryville, Calif., said the new products will come from "bombardment" treatment of ordinary plastics with high-energy beams of electrons and other atomic particles accelerated to nearly the speed of light and then fired into the material being processed.

"'Bombardment' will do for plastics what forging did for iron and what vulcanizing did for rubber. It changes the nature of the ordinary material, gives it extraordinary new properties and opens the way for new products and new industries," he said.

Shell Development Company has a new 3-million volt electron accelerator, which Dr. Gershinowitz called "the most powerful radiation source in industry."

Chemical Buyers Set Dates

Chemical Buyers' Group of the National Association of Purchasing Agents will hold the mid-winter meeting of its western division January 24 at the Congress hotel, Chicago. The group's eastern meeting will take place January 29 at the Commodore hotel in New York.

Renegotiation Rules Take on Final Form

Regulations setting forth the rules under which the chemical industry and other contractors of the government will apply the new exemptions granted by congress in the contract renegotiation law were issued in final form last week by the Renegotiation Board.

During the closing days of the last session, congress wrote several important changes in the section of the law exempting commercial articles and services from contract renegotiation which had been requested by industry and the board in the light of past experiences.

The changes were designed to eliminate much red tape connected with contract renegotiation and thereby speed up the work for the benefit of industry and the government.

The new regulations will apply to amounts received by contractors from the

—*Continued on page 38*

DuPont Will Do Work In Heavy Water Research

The Atomic Energy Commission last week announced that E. I. duPont de Nemours & Co., Wilmington, Del., has agreed to undertake design study and development work to determine the feasibility and economics of heavy water-moderated reactors for electrical power generation. The study will pay particular attention to the utilization of natural uranium as fuel.

The work will be performed under the existing contract between duPont and the commission for the operation of AEC's Savannah River plant in South Carolina. The study represents a further broadening of the scope of development work currently being undertaken by the commission in its power reactor development program.

Ammonium Phosphate-Nitrates Ready for Big Output

Ammonium phosphate-nitrate fertilizers are ready for large-scale production in the United States, Charles H. Young, chemical engineering manager for the Tennessee Valley Authority, believes. Pointing out that these fertilizers are high in plant food content, Mr. Young said that considerable technical information regarding processes TVA has developed is available to industry.

"We believe we have enough technical processes to guide others in starting production," Mr. Young said in the latest TVA news letter. "Several fertilizer companies have done experimental work on ammonium phosphate-nitrates but, so far as we know, there is no actual production in the country.

"We do not know whether any companies now are planning such production. One Canadian company has been shipping a 27-14-0 product (27 percent nitrogen, and 14 percent phosphate) into the country.

"Because ammonium phosphate-nitrates can be made from numerous readily available raw materials and by a variety of processes, and because the products are concentrated and effective fertilizers, we believe there are opportunities for private firms in the production of such fertilizers. This is particularly true since we have found it practical to make ammonium phosphate-nitrates in the continuous ammoniator, which TVA developed, and which is becoming standard equipment in many fertilizer plants," according to Mr. Young.

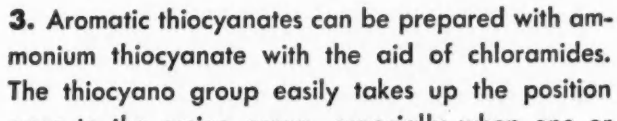
Can AMMONIUM THIOCYANATE be used in your process?

available in crystalline form or 50-60% solution

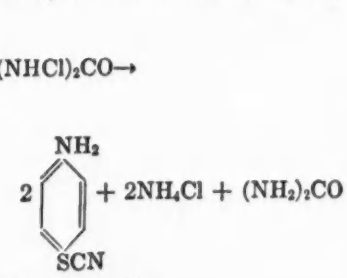
1. The Thiocyanate group can be introduced into many organic compounds by reaction of ammonium thiocyanate with the corresponding halide.

2. Thiocyanogen can be generated by the electrolysis of an aqueous solution of ammonium thiocyanate.

3. Aromatic thiocyanates can be prepared with ammonium thiocyanate with the aid of chloramides. The thiocyano group easily takes up the position para to the amine group, especially when one or both meta positions are vacant. If the position para to the amine group is occupied, the thiocyano group



aniline

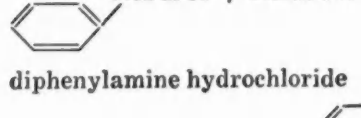


4-thiocyanoaniline

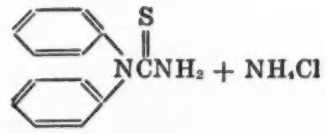
enters one of the ortho positions, but only with difficulty, with excessive heat liberation, and with the formation of a thiazole.

4. Some amine salts react with ammonium thiocyanate to give the corresponding amine thiocyanates.

5. Some amine salts yield the corresponding thioureas.



diphenylamine hydrochloride



N,N-diphenylthiourea

6. Guanidine thiocyanate may also be prepared in 90% yield by heating dicyandiamide with ammonium thiocyanate.

7. Amidines can be prepared by heating nitriles with ammonium thiocyanate at approximately 180°C.

8. 2-Thiohydantoins can be synthesized from acyl derivitives of a-amino acids with ammonium thiocyanate in acetic anhydride solution.

Baker Ammonium Thiocyanate is a product of synthesis stable at ordinary temperatures.* The crystalline material is soluble, clear, colorless, odorless. These advantages all contribute to economical, more trouble-free manufacturing.

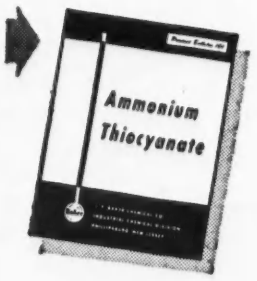
Because Baker controls all of the raw materials that go into Baker Ammonium Thiocyanate, you are always assured of uniform quality, and scheduled availability.

Baker Ammonium Thiocyanate in crystalline form is packaged in 200, 100, and 25-pound fibre drums—all polyethylene-lined. The 50-60% Solution is available in 8000-gallon, specially-lined tank cars. For further information, address: J. T. Baker Chemical Co., Executive Offices, Phillipsburg, N. J.

**Picks up moisture...should be kept in tightly closed containers.*

FREE UPON REQUEST!

Valuable Ammonium Thiocyanate Product Bulletin giving data on its properties and uses of Ammonium Thiocyanate, properties of aqueous solutions of Ammonium Thiocyanate, etc. Address your request to J. T. Baker Chemical Co., Phillipsburg, N. J.



Baker Industrial Chemicals

"Purity by the ton"

Baker CHEMICAL

CHEMICALS AND RELATED MATERIALS

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Current MARKET Quotations

Unless otherwise indicated, listings are first-hand quotations prevailing, according to information and belief, November 16 on large lots, f.o.b. New York, with the lowest in the left-hand column and the highest in the right-hand column. The listings do not represent bid and asked prices nor a range over the week. Differences between high and low may be accounted for by differences in quantity, quality, locality, or individual suppliers' views. An index to the weekly market reports is to be found on page 4.

A

Acacia (see Gum arabic).

Acenaphthene, below 92.5 C., m.p., dms., works lb. .40 - —
above 92.5 C. m.p., bbls., dms., lb. .41 - .50

Acetaldehyde 99%, dms., c.l., dlvd. lb. .12 - —
l.c.l., dlvd lb. .13½- —
tanks, dlvd lb. .10 - —

Acetaldol (see Aldol).

Acetanilide, tech., flaked, bbls., bgs., c.l., frt. alld lb. .30½- —
ton lots lb. .31½- —
smaller lots lb. .34½- —
USP, bbls., 2,000-lb. lots lb. .79 - —
smaller lots lb. .80 - .81

Acetic anhydride, dms., c.l., dlvd E. lb. .16½- —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd E lb. .14 - —

Acetoacetanilide, fib, dms., c.l., dlvd lb. .80 - —
l.c.l., dlvd lb. .81 - —

Acetoacet-o-chloroanilide, fib, dms., c.l., dlvd 1.35 - —
l.c.l., dlvd lb 1.36 - —

Acetoacet-o-toluidide, fib, dms., c.l., dlvd. lb. .82 - —
l.c.l., dlvd lb. .83 - —

Acetone, CP, dms., c.l., dlvd... lb. .10½- —
l.c.l., dlvd lb. .11½- —
tanks, dlvd lb. .08 - —

Methyl (see M)

Acetonitrile, dms., c.l., works ... lb. .45 - —
l.c.l., works lb. .47 - —

Acetophenetidin, USP, bbls., works, frt. equald lb. 1.17 1.19

Acetophenone, cns., dms lb. 1.21 - 1.35
tech., dms., l.c.l., works lb. .75 - —

4-Acetyl-p-aminophenol, dms., frt. adjusted lb. 1.75 1.85

Acetyltributyl citrate, tech., non-ret. dms., c.l., frt. alld E of Denver lb. .36 - —
l.c.l., frt. alld E. of Denver lb. .35 - —
tanks, frt alld E of Denver. lb. .33 - —

Acetyltriethyl citrate, tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .39 - —
l.c.l., frt allo E of Denver. lb. .40 - —
tanks frt allo E of Denver. lb. .37 - —

Acetyltri-2-ethylhexyl citrate, non-ret. dms., frt allo lb. .60 - —

Acid, abietic, coml., dms., c.l., works lb. .12 - —
l.c.l., ex whse lb. .1490- —
cryst., dms. c.l. works ... lb. .06½- —
l.c.l., works lb. .07 - .07½

Acetic, coml. or redist., 28%, bbls 100 lbs. 4.80 - —
56% bbls 100 lbs 6.25 - —
70% bbls 100 lbs. 9.95 - —
80% bbls 100 lbs.10.45 - —
glacial, syn. CP, dms., dlvd. 00 lbs.22.00 -23.00
tech, dms, c.l., dlvd 100 lbs.13.75 - —
l.c.l., dlvd. .... 100 lbs.14.25 - —
tanks, dlvd 100 lbs.10.00 - —
USP, cbys., inclusive, dlvd., 100 lbs.31.00 -32.00

Acetic anhydride (see Acetic anhydride above).

Acetylsalicylic, USP, special, makers, primary distrib., bbls., 1,000-lb lots, point of shipt lb. .61 - —
standard, fine, cryst., gran., (30-40 mesh) powd., (80 mesh) bbls., 1,000-lb. lots. lb. .56 - .58

Freight equald, shipt. identical quantity over standard routes, from N. Y., Phila., Midland, Mich. Chicago and St. Louis.

Adipic, bgs., c.l. dlvd lb. .32 - —
l.c.l., dlvd lb. .34¾- —

Aminoacetic, NF, bbls., frt. adjusted lb. 1.50 - 1.75

p-Aminobenzoic, tech., dry, dms., works lb. 1.74 - 1.77

USP, dms., 1,000-lb. lots or more, works lb. 2.30 - —
smaller lots, works lb. 2.53 - 2.60

p-Aminosalicylic, dms., 100 lbs or more, frt. adjusted lb. 3.70 - —

Anthranilic, 99%, 150-lb. dms., dlvd. lb. 1.15 - —

Arsenous, tech. (see Arsenic, white).
USP (see Arsenic trioxide).

Ascorbic USP, dms., 25-100 kilo lots kilo.12.00 - —
10-kilo lots kilo.12.35 - —
5-kilo lots kilo.12.75 - —
bots 1-kilo lots kilo.13.00 - —
500-gram lots kilo.13.50 - —

Battery, cbys., c.l., works, E. 100 lbs. 2.35 - —
l.c.l., works, E. 100 lbs. 2.65 - 3.45

Acacia—Acid, Itaconic

Acid, benzoic, tech., bbls., dms., 100 lb lots or more lb. .44 - —
USP, bbls. dms. 100-lb. lots or more lb. .54 - —

Betahydroxynaphthoic (see Acid, b-Oxynaphthoic).

Betaoxynaphthoic (see Acid b-Oxynaphthoic).

Boric, tech., 99.9%, cryst., bgs., c.l., works ton.126.75 - —
ton lots, ex whse, N. Y. or Chi. ton.178.50 - —
smaller lots, same basis. ton.183.50 - —
dms., c.l., works ...ton.151.25 -172.25
ton lots, ex whse, N. Y. or Chi ton.203.00 -223.00
smaller lots, same basis. ton.208.00 -228.00
gran., bgs., c.l., works ...ton.101.75 - —
ton lots, ex whse, N. Y. or Chi. ton.153.50 - —
smaller lots, same basis. ton.158.50 - —
dms., c.l., works ... ton.126.25 -147.25
ton lots, ex whse, N. Y. or Chi ton.178.00 -198.00
smaller lots, same basis. ton.183.00 -203.00
bulk, c.l., works ....ton.93.75 - —

Acid, boric, tech., 99.9% powd., bgs., c.l., works ton.106.75 - —
ton lots, ex whse, N. Y. or Chi ton.158.50 - —
smaller lots, same basis. ton.163.50 - —
dms., c.l., works ton.131.25 -152.25
ton lots, ex whse, N. Y. or Chi ton.183.00 -203.00
smaller lots, same basis. ton.188.00 -212.00

USP boric acid $25 per ton high-

Broenners, bbls lb 1.76 - —

Butyric, 99%, dms., c.l., works lb .34 - —
l.c.l., works lb. .34½- —
tanks, works lb. .32½- —

Capric, dms lb. .25 .27

Caprylic, dms lb. .25 .27

Cassella, dms. frt. alld., 100% basis lb 1.44 1.75

Castor, oil, dms lb. .17¾- .19¾

Chicago paste, bbls., frt. allo lb. 3.21 - —

Chloroacetic, mono purif., flake, 99% dms lb. .23½- .25½
tech. flake 96-97%, dms., frt. equald lb. .20 - .21

o-Chlorobenzoic, fib dms., t.l., works lb 1.10 - —
smaller lots, works lb. 1.25 - —

Acid, p-chlorobenzoic, fib, dms., 2,000 lbs. or more, works lb 2.25 - —
less than 2,000 lbs., same basis. lb 2.30 - —

Chlorosulfonic, dms., c.l., frt. equald lb. .0463- —
l.c.l., frt. equald lb. .0515- —
tanks, frt. equald lb. .0415- —

Acid, chlorosulfonic, in stainless steel dms. ½c. per lb. higher.

Chromic, 99¾%, dms., c.l., works, frt. equald lb. .29½- —
l.c.l., dlvd. N. Y. Metropolitan area lb. .30 - .31

NF (see Chromium trioxide).

Cinnamic, refd., bots lb 2.50 3.50

Citric, USP, anhyd, gran., fine gran., bgs., dms., c.l. lb 29½ .30
10,000-lb lots 1 shipt. lb 30 30⅝
smaller lots lb. .30½- .31
hydrous, gran., fine gran., bgs., dms., c.l lb 27½ 28
10,000-lb lots 1 shipt lb 28 28⅝
smaller lots lb. 29 29⅝
Powdered citric acid ½c higher

Cleve's, mixed, bbls lb. 1.05 - —

Coconut oil, dist., dms lb 25 27
tanks lb 23 —
dbl dist., dms lb 25 27
tanks lb 23 24

Corn oil, dist., dms lb 18½ 18⅝
tanks lb 14¼ —

Cottonseed oil, dist., dms lb 17¼ 17⅝
tanks lb 14¼ —

2,3-Cresotic, dms., ton lots works lb 70 - —
less than ton lots works lb 72 - —

Cresylic, oaltar, dom., resin and tricresyl phosphate grades, 50% 207° or above, tanks, frt. equald gal. 1.10 - —
204° to 207° C., tanks, frt equald gal. 1.20 - —
non-resin grade, 50% 210° or above, total range over 9° C., dms., c.l., frt. equald gal. 1.15 - —
l.c.l., frt equald gal. 1.19 - 1.20
tanks, frt. equald gal. 1.00 —
Imp. 75% at 215° C. or over, dms., ex wise gal. 95 - —
petroleum, dom., 195° to 214° C., non-ret. dms., 65 to c.l. works, San Francisco and Los Angeles gal. 80 - —
l.c.l. same basis gal. .82 .84
tanks, same basis gal. .65 —
200° C. to 212° C., tanks, Wilmington, Cal lb. 65 .72
211° C. to 237° C., non-ret. dms., c.l., San Francisco and Los Angeles gal. 76 —
l.c.l., same basis gal. .78 .80
tanks, same basis gal. .61 —
220° C. to 242° C., tanks, Wilmington, Cal lb. .62 .67
245° C. to 295° C., tanks, Wilmington, Cal gal. 50 —

Crotonic, fib dms., 200 lbs. or more, works lb. .50 —

Cyanoacetic, tech. bbls lb .90 1.25

Dichlorophenoxyacetic (see 2,4-D).

Diethylbarbituric (see Barbital).

Diglycolic, bgs. works lb. .14 —

Dithiodibenzoic, dms., 1,000-lb. lots, works lb 1.45 - —
2-Ethyl hexoic, dms., c.l., dlvd lb .57 - —
l.c.l. dlvd lb .58 —
tanks dlvd lb .34½ —

F, crude, paste, bbls., works lb. 2.10 - —

Folic, bots., fib, cns., kilo lots or more, works kilo 1.40 - —

Formic, 85%, cbys., c.l., works lb. .1570 —
l.c.l., works lb. .1620- .1720
90%, cbys., c.l., works lb. .1625 —
l.c.l., works lb. .1675- .1773

Fumaric, tech. bgs. dms., c.l., frt allo E lb. .23½ —
l.c.l., same basis lb. .26½ —

Gallic, NF VII, bots 1,000-lb lots lb 1.80 —
smaller lots lb 1.82 2.00
tech., bbls., 1,000-lb lots lb 1.58 —
smaller lots lb 1.82 2.00

Gamma, dry, grd, bbls, frt allo lb 1.50 —
paste, bbls, frt allo lb 1.45 —

Gluconic, tech. 50% bots lb .25 .35
cbys lb .19 —
dms lb 15½- —

l-Glutamic, 99½%, fib, dms., 100-lb. lots, frt allo lb. 2.00 - —
25-lb. lots, frt allo lb. 2.05 - —

Glycolic (see Acid, hydroxyacetic).

H, dry, bbls, c.l. works, 100% basis lb 1.00 - —
l.c.l. same basis lb 1.02 - —

Hydriodic, 1.50 s.g. cbys lb 2.14 - —
1.70 s.g., cbys lb 3.23 - —

Hydrobromic, medicinal, 48%, cbys, dlvd E lb .37 .43

Hydrochloric, anhyd (see Hydrogen chloride).

18° cbys., c.l., works 100 lbs 2.50 —
l.c.l. dlvd. Metropolitan area 100 lbs 2.90 3.05
tanks, works, frt equald ton 28.00 - —
20° cbys., c.l., works 100 lbs 2.75 - —
l.c.l., dlvd Metropolitan area 100 lbs 3.15 - —
tanks, works, frt equald ton 30.00 - —
22° cbys., c.l., works 100 lbs 3.25 - —
l.c.l., dlvd. Metropolitan area 100 lbs 3.65 - —
tanks, works, frt. equald ton.33.00 - —
CP, USP, consumers, cbys., ex. tra, c.l. works lb 15¾ —
l.c.l., same basis lb. .17¼- 17¾
5-pint bots, extra, cns., c.l., same basis lb .20¼ —
l.c.l., same basis lb. .22¼- .23¼

Acid, hydrochloric, CP, USP, prices to dealers 1½c per lb. less.

Hydrocyanic, cyls. c.l. dlvd lb .70 —
l.c.l., same basis lb. .75 - .90
dilute, NF, 2%, 5-lb bots lb. .40 —

Hydrofluoric, anhyd (see Hydrogen fluoride).

aqueous, 70%, 55-gal. dms., c.l., t.l., dlvd 100 lbs.19.25 - —
l.c.l., l.t.l., dlvd 100 lbs.20.75 - —
20-gal. dms., c.l., t.l., dlvd. 100 lbs.21.00 - —
l.c.l., l.t.l., dlvd 100 lbs.22.50 - —
tanks, works, frt. equald. 100 lbs.15.50 —

Delivered prices apply to all states east of Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Washington, and Wyoming. In those states add $2.70 per cwt. for drum delivery.

Hydrofluosilicic, dms. works, 50% basis lb .06 —

Hydroxyacetic, tech., 70%, non-ret. bbls., Phila., 100% basis lb. .136 —
tanks, Belle W. Va., 100% basis lb .095 —

Hypophosphorus, purif., 50%, cbys lb 1.50 1.32
USP, cbys. lb. .88 —

Isonicotinic, 100-lb fib dms., works lb. 4.25 —

Hydrazide (see Isoniazid).

Itaconic, tech., fib, dms., c.l., works lb. .43 - —
l.c.l., works lb. .44 - —
purif., fib dms., c.l., works lb .53 - —
l.c.l., works lb. .54 - —

Abbreviations

Used in OPD Market Quotations

alld.	allowed	distr.	distributor	NNR	New and Nonofficial Remedies
amorph.	amorphous	djns.	demijohns		
AMP	American melting point	dlvd.	delivered	No.	number
anhyd.	anhydrous	dms.	drums	nom.	nominal
a.p.a.	available phosphoric acid	dom.	domestic	o-	ortho
approx.	approximately	E.	east	ord.	ordinary
artif.	artificial	e.p.	end point	oz.	ounce
ASTM	American Society for Testing Materials	equald.	equalized	p-	para
		exp.	expressed	Pac.	Pacific
Atl.	Atlantic	F.	fahrenheit	pf.	proof
Be.	Baume	ferment.	fermentation	phos.	phosphate
bbls.	barrels	f.f.a.	free fatty acid	photo.	photographic
bgs.	bags	f.f.c.	free from chlorine	pkgs.	packages
bls.	bales	fib.	fiber	powd.	powdered
bots.	bottles	f.o.b.	free on board	precip.	precipitated
b.p.	boiling point	f.p.a.	free of prussic acid	prod.	producer
b.p.l.	bone phosphate of lime	frt.	freight	pt.	point
b.r.	boiling range	gal.	gallon	pulv.	pulverized
bxs.	boxes	gran.	granular	purif.	purified
C.	centigrade	grd.	ground	redist.	redistilled
cbys.	carboys	i.&a.	iron and aluminum	refd.	refined
CD	completely denatured	i.b.p.	initial boiling point	refy.	refinery
c.i.f.	cost, insurance, freight	imp.	imported	reg.	regular
cks.	casks	incl.	included	resub.	resublimed
c.l.	carlots	indust.	industrial	ret.	returnable
cns.	cans	kgs.	kegs	SD	specially denatured
coml.	commercial	l-	laevo	s.d.	single distilled
conc.	concentrated	lacq.	lacquer	S. E.	southeast
CP	chemically pure	lb.	pound	sec.	secondary
		l.c.l.	less than carlots	secs.	seconds
cps.	centipoises	l.t.l.	less truckload	s.g.	specific gravity
cryst.	crystal	liq.	liquid	ship't	shipment
cs.	cases	mfrs.	manufacturers	soln.	solution
ctns.	cartons	m-	meta	s.u.	standard unit
cyls.	cylinders	m.a.p.	mixed aniline point	syn.	synthetic
d-	dextro	min.	minimum	tanks.	railroad tankcars
dbl.	double	m.p.	melting point	tech.	technical
denat.	denatured	N-	nitrogen	tert-	tertiary
dest-dist.	destructive-distilled	n-	normal	t.l.	truck loads
dl-	dextro-laevo	nat.	natural	t.w.	tank wagons
dist.	distilled	neut.	neutral	USP	U. S. Pharmacopoeia
		NF	National Formulary	vis.	viscosity
				VM&P	varnish makers & painters
				W.	west
				whse.	warehouse
				w. w.	water-white

A unit-ton is 2,000 pounds of 1 percent of the basic constituent or other standard of the material. The percentage figure of the basic constituent multiplied by the price figure shown gives the price of 2,000 pounds of the material.

Acid, J, paste, bbls., works, 100% basis lb 2.45 - —
powd., bbls., sam. basis lb 2.50 - 2.85
Koch, bbls., frt. alld., 100% basis. lb. 1.00 - —
L, buls., works lb. 1.25 - —
Lactic, edible, 50%, bbls., 20 or more lb. .1821- .215
smaller lots lb. .1921- .225
80%, bbls., 5 or more lb. .3121- .37
smaller lots lb. .3171- .375
plastic grade 50%, bbls., 20 or more works lb. .23 —
1 to 19 lb. .235 - —
80%, bbls., 5 or more lb. .385 - —
tech., 22% bbls. c.l., works 100 lbs 6.30 - —
l.c.l., works 100 lbs 6.70 - —
cbys., l.c.l., works 100 lbs. 12.20 —
44%, bbls., c.l., works 100 lbs. 11.45 11.95
l.c.l., works 100 lbs. 11.85 12.35
USP, 85% cbys. lb. .85 .88
Laurent's, bbls lb. .60 —
Lauric, 90%, dms lb. .36½ .38½
Linseed oil, dist., dms lb. .20 - —
w.w., dms lb. .2300- —
Maleic, cryst, powd, dms lb .37 .38
Malic, tech., dms lb. .50 —
Mandelic, NF dms., 1,000-lb lots. lb 2.35 —
smaller lots lb 2.40 2.50
Metanilic, dms., works lb. .57 .75
Methacrylic, glacial, 98%, dms., truckloads, works lb. .47 - —
smaller lots, works lb. .47½- .80
tanks, works lb. .45 - —

Acid, molybdic, 85%, dms, works lb. 1.20 - —
Monochloroacetic, purif. (see Acid, Chloroacetic mono-).
Muriatic (see Acid, hydrochloric).
Myristic, dms lb .26 .28
1-naphthol-4 sulfonic (see Acid, Neville and Winthers)
1-Naphthol-5-sulfonic (see Acid, L).
1-Naphthol-5-sulfonic 8-amino (see Acid, S).
1-Naphthol-3,6-disulfonic 8-amino (see Acid, H).
2-Naphthol-6,8-disulfonic (see Acid, Gamma).
5-Naphthol-7-sulfonic 2-amino (see Acid, J).
Naphthol sulfonic mixed (see Acid, Cleve's).
1-Naphthylamine-5-sulfonic (see Acid, Laurent's).
2-Naphthylamine-4,8-disulfonic (see Acid, Cassella).
2-Naphthylamine-6-sulfonic (see Acid, Broenner's).
2-Naphthylamine-7-sulfonic (see Acid, F).
2-Naphthylamine-1-sulfonic (see Acid Tobias).
Nevile and Winther's, dms., frt alld lb. 1.30 - —
Nicotinic, USP dms., dlvd kilo 8.00 8.30
Amide, USP (see Nicotinamide)
Nitric, 36° Be, cbys, c.l., works, E 100 lbs. 5.75 —
l.c.l., works, E 100 lbs 6.05 6.85
38° Be, cbys., c.l., works, E 100 lbs 6.25 —
l.c.l., works E 100 lbs 6.55 7.35
40° Be, cbys., c.l., works, E 100 lbs 6.75 —
l.c.l., works, E 100 lbs 7.05 7.85

Acid, nitric, 42° Be, cbys., c.l., works, E 100 lbs. 7.25 - —
l.c.l., works, E 100 lbs. 7.55 - 8.35
58.5 to 68% HNO_3, tanks, works, 100% basis 100 lbs. 3.90 - —
94½ to 95½% HNO_3, tanks, works, 100% basis 100 lbs. 4.90 - —
CP, NF, consumer, cbys., extra, c.l., works lb. .18½- —
l.c.l., same basis lb. .20 - .20½
5 pt. bots extra, cs., c.l., same basis lb. .22½- —
l.c.l., same basis lb. .24 - .25
p-Nitrobenzoic dms., c.l., works. lb. .72 - —
l.c.l., works lb. .73 - —
Oleic, s.d., dms lb. .18½ .20½
tanks lb. .16½- —
dbl. dist. (white) dms. lb. .20½ .22½
tanks lb. .18½- —
Oleum (see Acid, sulfuric, fuming).
Orthochlorobenzoic (see Acid, o-Chlorobenzoic).
Orthocresotinic (see Acid, 2,3-Creosotic)
Oxalic, bbls, c.l., works lb. .16½- —
10,000-lb lots, works lb. .16¾- —
smaller lots works lb. .17¾- —
b-Oxynaphthoic fib dms. 250 lbs. or more, frt alld lb 1.14 1.17
Palm dist., dms lb. .14¾- .16¾
tanks lb. .12¾- —
Para aminobenzoic (see Acid, p-Aminobenzoic).
Para aminosalicylic (see Acid, p-Aminosalicylic).
Parachlorobenzoic (see Acid p-Chlorobenzoic).
Paramethylphenylcinchonic (see Neocinchophen).
Paranitrobenzoic (see Acid p-Nitrobenzoic)
Paratoluidinmetasulfonic (see Acid p-toluidine-m-sulfonic).
Peri, dry, frt. alld. lb. 1.35 - —
paste, frt. alld. lb. 1.30 - —
Phenylacetic, pure, cryst., cns. lb. 1.45 - 1.75

Acid, phenylcinchoninic (see Cinchophen).
Phenylglycolic (see mandelic)
Phosphoric, food grade, 75%, cbys., c.l., works, E., frt. equald 100 lbs. 6.75 - —
l.c.l., same basis 100 lbs. 7.00 - 7.50
tanks, works 100 lbs. 5.35 —
80%, cbys., c.l., frt. alld. 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 7.85 9.10
tanks, works 100 lbs. 5.75 —
NF, 85%, cbys., c.l., works lb. .0825- —
c.l., works lb. .0850- .0975
tanks works lb. .0640- —
Picric, NF, bbls lb. .85 - —
tech., bbls lb. .44 - —
Propionic, syn., pure, dms., c.l., frt alld lb. .22¾- —
l.c.l. frt. alld lb. .23¾- —
tanks, frt. alld lb 20¾- —
Pyrogallic, NF (see Pyrogallol)
tech. bbls lb 2.75 2.99
Ricinoleic (see Acid, castor oil, split).
S., bbls., works lb 3.25 - —
Salicylic, crude fib dms, c.l., frt. alld lb. .35 - —
l.c.l., frt. alld 10,000 lbs. or more lb. .36 - —
sublimed, tech. fib. dms., c.l., dlvd lb. .37 - —
l.c.l., dlvd. lb. .41 - —
USP, cryst., fib dms lb. .48 - —
powd., fib dms lb. .55 - —
Sebacic, purif., dms., c.l. works lb. .64 - —
l.c.l., works lb. .66 - .70
Soybean oil, dbl. dist., dms lb. .18¾- .20¾
tanks lb. .16¼- —
s.d., dms lb. .17¼- .19¼
tanks lb. .15¼- —
Stearic, dbl. pressed, bgs lb. .15¼ .17¼
single pressed, bgs lb. .14¾- .16¾
triple pressed, bgs lb. .17½- .19½
Succinic, purif., cryst., bbls., works lb. .62 .75
Sulfanilic, tech., dms, c.l., frt. alld lb. .21 - —
l.c.l., frt. alld lb. .23 - —
Sulfuric 60° Be cbys., c.l., works 100 lbs 2.00 - —
l.c.l., works 100 lbs 2.45 - —
tanks, works ton 18.60 - —
66° Be, cbys., c.l., works. 100 lbs. 2.25 - —
l.c.l. works 100 lbs 2.95 - 3.35
tanks, works ton 22.35 —
98% tanks, works ton 23.50 - —
99-100% tanks, works ton 23.95 - —
CP, NF, consumers, frt. equald. lb. .12¾- —
l.c.l., same basis lb. .14¼- .14¾
5-pt. bots., extra cs., c.l., works, frt alld lb. .16¼- —
l.c.l., same basis lb. .18¼- .18¾
fuming (oleum), 20% tanks, works ton 25.00 - —
40% tanks, works ton 29.00 - —
65% tanks, works ton 39.50 - —
Tall oil, dms., c.l., works lb. .09 - .09½
tanks, works lb .07½ .08
Tallow dist., dms lb. .15¼- .17¼
tanks lb. .13¼- —
hydrogenated, dms lb. .14¼- .16¼
Tannic, NF fluffy bbls., 1,000-lb. lots lb. 2.05 —
smaller lots lb. 2.06 2.10
powd., bbls., 1,000-lb. lots lb. 1.9- —
smaller lots lb. 1.96 2.01
tech., dms lb. 1.65 —
Tartaric, USP, dom., 230 or 250-lb. dms., c.l lb. .49 - —
10,000-lb. lots, 1 shipt lb. .49½- —
smaller lots lb. .50 - —
100-lb. dms lb. .51 - —
imported, bgs lb. .42 - .45
Thioglycolic, refd., cbys., 100% basis lb. 1.35 1.55
Thiosalicylic, purif., dms., 1,000-lb. lots, works lb. 4.00 - —
Tobias, bbls., frt. alld lb. .81 - —
p-Toluenesulfonic, dms., c.l., t.l., works lb. .17 - —
l.c.l., works lb. .18 - —
p-Toluene sulfonic, monohydrate, dms., c.l., or t.l lb .90 - —
125 lbs. to t.l lb 1.00 - —
o-Toluidine-m-Sulfonic, frt. alld. lb. .70 - —
p-Toluidine m-sulfonic, bbls., works lb .92 1.04
Trichloroacetic, buts. lb. 2.00 - 2.50
Trichlorophenoxyacetic (see 2,4,5-T).
Tungstic, tech., dms., 1,000-lb. lots, works lb. 3.00 - —
smaller lots, works lb. 3.15 - 3.50
Undecylenic, dms lb 1.40 —
Aconite root, bls lb. .50 - .55
Acrolein, tech., dms., c.l., works lb. .47 - —
l.c.l., works lb. .47½- —
tanks works lb. .46 - —
Acrylonitrile, dms., c.l., t.l., frt. equald lb. .31 - —
l.c.l., l.t.l., frt. equald lb. .32 - —
tanks, frt. equald lb. .28 - —
ACTH, cryst., bulk, 1,000 units/gram. lots gram 15.00 - —
Adeps lanae (see Lanolin)
Adrenocorticotropic hormone (see ACTH).
Agar, USP Kobe No. 1, strip, bls. lb. 2.25 - —
powdered 30 mesh fib., dms lb. 2.75 - —
dl-Alanine dms. works lb 8.50 11.00
Albumin, blood, dark (see Blood, dried, soluble).
light, dms lb. .65 1.00
Egg, edible, cryst., powd., bbls lb. 1.74 - 1.76
flake lb. 1.70 - 1.72
tech., cryst., bbls lb 1.08 - 1.10
Alcohol, allyl, dms., c.l. dlvd lb .32 - —
l.c.l., dlvd lb .33 - —
tanks, dlvd lb .30 - —
Amyl, ex fusel oil (see Fusel oil, refd.)
ferment., refd., 128°-132°C., dms. l.c.l., dlvd lb. .43 - —
ACS grade dms., l.c.l., dlvd lb. .45 - —
ex-pentane, mixed, amyls, dms., c.l., frt. alld lb. .18½- —
l.c.l., frt. alld lb. .19½- —
tanks, frt. alld lb. .16 - —
primary, dms., c.l., frt. alld. lb. .19¾- —
l.c.l., frt. alld lb. .20¾- —
tanks, frt. alld lb. .17¾- —
sec-synthetic, dms., c.l., works, frt. alld lb. .19 - —
l.c.l., works lb. .20 - —
tanks, works lb. .17 - —
tert-synthetic, dms., c.l., frt. alld, E lb. .18½- —
l.c.l., frt. alld E lb. .19½- —
tanks, frt. alld E lb. .16 - —
1-pentanol (syn normal), dms., c.l. works lb. .41½- —
l.c.l., works lb. .42½- —
tanks, works lb. .39½- —
2-pentanol, dms., c.l., works lb. .65 —
l.c.l. works lb. .70 —
tanks, works lb. .60 —
Benzyl, NF dms lb. .64 .79
tech., dms, dlvd lb. 47½ .49
n-Butyl, ferment, dms., c.l., frt. alld lb. .16½- —
l.c.l., frt. alld lb. .17½- —
tanks, frt. alld lb. .14 - —
synthetic, dms., c.l., dlvd lb. .16½- —
l.c.l., dlvd lb. .17½- —
tanks, dlvd lb. .14 - —
sec-synthetic, dms., c.l., dlvd. lb. .14½- —
l.c.l., dlvd lb. .15½- —

One of the World's Major Producers of

★ *Ethyl Alcohol*
★ *Butyl Alcohol*
★ *Butyl Acetate*
★ *Acetaldehyde*
★ *Butadiene*
★ *Ethyl Acetate*
★ *Amyl Acetate*
★ *Acetone*
★ *Acetic Acid*
★ *Refined Fusel Oil*

FOR UNIFORM QUALITY—
FOR STEADY SUPPLY—
FOR PROMPT DELIVERY

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NEW YORK • NEW ENGLAND • MIDWESTERN DISTRIBUTORS, PUBLICKER ALCOHOL & CHEMICAL SALES CORP.
PHILADELPHIA—LOCUST 4-1400 • NEW YORK—OXFORD 5-4160 • BOSTON—HOMESTEAD 9-0022
CHICAGO—RANDOLPH 6-6678 • CLEVELAND—CHERRY 1-6140

Alcohol, n-butyl, sec-synthetic, tanks, dlvd ..... lb. .12 - —
tert-synthetic dms., c.l., frt. alld. lb. .14 - —
l.c.l., frt. alld ..... lb. .15 - —
tanks, frt. alld. ..... lb. .12 - —
Capryl, 95%, dms., c.l., works lb. .21½- —
l.c.l., works ..... lb. .22½- .23½
tanks, works ..... lb .19¼- —
Cetyl, extra, fib. cns., 500-lb. lots or more lb. .65 - .72
NF, fib. cns., 140-lb. lots or more lb. .48 - —
Cinnamic, bots ..... lb. 2.15 - 2.75
Decyl mixed isomers, dms., c.l., dlvd. lb. .23½- —
l.c.l., dlvd ..... lb. .24½- —
tanks, dlvd ..... lb. .21 - —
perfume grade, bots ..... lb. 1.75 - 2.00
normal (see 1-Decanol).
Denat. CD-12, CD-13 CD-14, CD-17, dms., c.l., dlvd. E of Rockies gal. .64½- .66
l.c.l., same basis gal. .63½- .77
tanks, dlvd., same basis, gal. .48½ .50

Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.

Proprietary solvent, dms., c.l., dlvd. E of Rockies gal. .66 - —
l.c.l., same basis ..... gal. .71 - .77
tanks, same basis ..... gal. .50 - —

Tankcar sales require written authorization by Alcohol and Tobacco Tax Div.

SD1, dms., dlvd. E. of Rockies, gal. .66 - —
l.c.l., same basis .... gal. .71 - .77
tanks, same basis ..... gal. .50 - —
SD2B, dms., c.l., dlvd. E. of Rockies gal. .64 - —
l.c.l., same basis ..... gal. .69 - .75
tanks, same basis ..... gal. .48 - —
SD3A, dms., c.l., dlvd. E. of Rockies gal. .635 - —
l.c.l., same basis ..... gal. .685 - .745
tanks same basis ..... gal. .475 - —
SD23A dms. c.l. dlvd. E. of Rockies gal. .655 - —
l.c.l., same basis ..... gal. .705 - .765
tanks, same basis ..... gal. .495 - —
SD23H, dms., c.l., dlvd. E. of Rockies gal. .66 - —
l.c.l., same basis ..... gal. .71 - .77
tanks, same basis ..... gal. .50 - —
SD29, dms., c.l., dlvd E. of Rockies gal. .645 - —
l.c.l., same basis ..... gal. .695 - .755
tanks, same basis ..... gal. .485 - —
SD30, dms., c.l., dlvd. E. of Rockies gal. .63 - —
l.c.l., same basis ..... gal. .68 - .74
tanks, same basis ..... gal. .47 - —
SD35A dms. c.l. dlvd. E. of Rockies gal. .665 - —
l.c.l. same basis .... gal. .715 - .775
tanks, same basis ..... gal. .505 - —
SD40, dms., c.l., dlvd. E. of Rockies gal. .645 - —
l.c.l., same basis ..... gal. .695 - .755
tanks, same basis ..... gal. .485 - —

West coast dlvd. prices are the same as eastern prices, except in Idaho, Montana, Oregon and Washington, where a 5c. differential on tankcars is maintained.

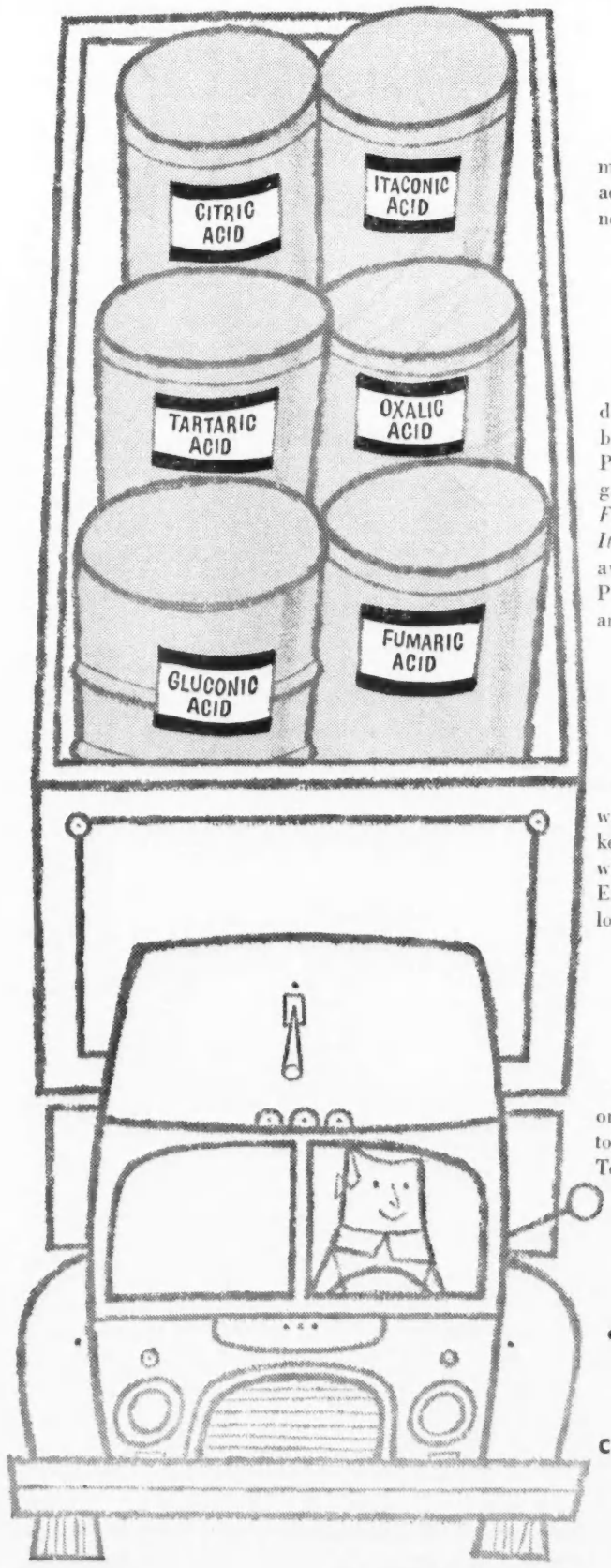
Diacetone acetone-free, dms., c.l., dlvd. lb. .15 - —
l.c.l., dlvd ..... lb. .16 - —
tanks, dlvd ..... lb. .125 - —
tech., dms., c.l., dlvd ..... lb. .145 - —
l.c.l., dlvd ..... lb. 1.55 - —
tanks, dlvd ..... lb. .12 - —
Ethyl, 190 pf., USP, tax paid, dms., c.l., dlvd. E. of Rockies gal.20.58 - —
l.c.l., same basis gal.20.63 -20 69
tanks same basis ... gal.20.42 - —
tax free, dms., c.l., dlvd. E. of Rockies gal. .63 - —
l.c.l., same basis gal. .68 - .74
tanks, same basis gal. .47 - —
absolute, 200 pf. tax paid, dms., dlvd. E of Rockies gal.21.68 - —
l.c.l., same basis gal.21.73 -21 79
tanks, same basis ... gal.21.52 - —
2-Ethylbutyl, dms., c.l., works lb. .30 - —
l.c.l., works ..... lb. .30¾- —
tanks, works ..... lb. .28 - —
2-Ethylhexyl, dms., c.l., dlvd. E. lb. .24¼- —
l.c.l., same basis ..... lb. .25¼- —
tanks, same basis ..... lb. .21¾- —
Furfuryl cns. works ..... lb. .29 - —
dms., c.l., Memphis, Tenn. .... lb. .20 - —
Newark N J ..... lb. .21½- —
l.c.l., Memphis, Tenn. ..... lb. .21 - —
Newark N J ..... lb. .22½- —
tanks Memphis Tenn ..... lb. .184 - —
Hydroabietyl, tech., solid, Zone 1, dms., c.l., dlvd. lb. .29¼- —
l.c.l., dlvd ..... lb. .29¾- .30¼
tanks, dlvd ..... lb. .27¼- —

Zone 1 for hydroabietyl alcohol comprises all of continental US except Ariz., Calif., Colo., Idaho, Mont., Nev., N. M., Ore., Utah, Wash., Wyo. and the western part of Texas.

Isoamyl, dms., c.l., works, frt. alld. E. lb. .28 - —
l.c.l., same basis ..... lb. .29 - —
tanks, same basis ..... lb. .25 - —
Isobutyl, dms., c.l., dlvd ..... lb. .15½- —
l.c.l., dlvd ..... lb. .16½- —
tanks, dlvd ..... lb. .13 - —
Iso-octyl, dms., c.l., dlvd. E. ... lb. .23½- —
l.c.l., dlvd E ..... lb. .24½- —
tanks, dlvd E ..... lb. .21 - —
Isopropyl, refd. 91%, dms., c.l., dlvd gal. .53 - —
l.c.l., dlvd ..... gal. .60 - —
tanks, dlvd ..... gal. .37 - —
95%, c.l., dlvd ..... gal. .55 - —
l.c.l., dlvd ..... gal. .62 - —
tanks, dlvd ..... gal. .39 - —
99%, dms., c.l., dlvd ..... gal. .57 - —
l.c.l., dlvd. ..... gal. .64 - —
tanks, dlvd ..... gal. .41 - —
Lauryl, bots. ..... lb. 2.00 - 2.50
Methyl (see Methanol).
Methylamyl (see Methyl isobutyl carbinol).
Octyl, perfumer's grade, bots lb. 1.60 - 3.25
tech. (see Octanol, normal).
2-Phenylethyl, extra, dms ..... lb. 1.14 - 1.45
standard, dms ..... lb. 1.10 - 1.60
n-Propyl, dms., c.l., dlvd ..... lb. .13½- —
l.c.l., dlvd ..... lb. .14½- —
tanks, dlvd ..... lb. .11 - —
Tetrahydrofurfuryl, dms., c.l. or t.l., f.o.b. Memphis, Tenn lb. .37 - —
l.c.l. or l.t.l., f.o.b. Memphis, Tenn lb. .38 - —
f.o.b. Newark, N. J ..... lb. .40 - —
tanks, dlvd. E. of Denver ... lb. .365 - —
dlvd. W. of Denver ..... lb. .375 - —
Tridecyl mixed isomers, dms., dlvd lb. .26½- —
l.c.l., dlvd ..... lb. .27½- —
tanks, dlvd ..... lb. .24 - —
Wood (see Methanol).
Aldol, 95%, dms., works ..... lb. .23 - —
denaturing grade dms ..... gal. 2.15 - —
Aldrin, tech. fib. dms. c.l., t.l., dlvd lb. .80 - —
l.c.l., dlvd ..... lb. .85 - —
Aletris root, bgs ..... lb. 1.75 - 1.85
Algin (see Sodium alginate).
Alizarine (see 1,2-dihydroxy anthraquinone).
Allethrin, 90%, dms., frt. alld lb.28.60 - 28.90
soln., 20% dms., 200-2,000 lb. lots, frt. alld lb. 6.50 - 6.55
2½% dms. frt. alld ..... lb. .95 - 1.00
Allspice (see Pimento).
Allyl bromide, cbys., works ..... lb. 1.45 - 1.50
Chloride, dms., c.l., dlvd ..... lb. .17 - —
l.c.l., dlvd ..... lb. .18 - —
tanks, dlvd ..... lb. .15 - —
Aloe, Cape, cs ..... lb. .50 - —
powd., cs ..... lb. .65 - —
Curacao, kgs ..... lb. .60 - —
Aloin, USP, bbls., dms., kgs .... lb. 3.35 - 3.75
Alphanaphthol (see a-Naphthol).
Alphanaphthylamine (see a-Naphthylamine).
Alphanitronaphthalene (see a-Nitronaphthalene).
Alphapicoline (see a-Picoline).
Alphaterpineol (see a-Terpineol).
Alphatocopherol (see a-Tocopherol).
Alum, ammonium, gran., bgs., works 100 lbs 4.30 - —
lump, dms., works ... 100 lbs 5.05 - —
powd., dms., works ... 100 lbs 5.20 - —
USP, burnt, dms. ..... lb. .20 - .21
hydrous, dms. ..... lb. .07¾- .08
Potassium, gran., bgs., works, 100 lbs. 4.55 - —
lump, dms., works .. 100 lbs. 5.30 - —
powd., dms., works ... 100 lbs. 5.45 - —
USP, burnt dms ..... lb. .20 - .21
hydrous, dms ..... lb. .07¾- .08
Potash-chrome, dms ..... lb. .17 - —
Alumina, calcined, bgs., c.l., works, lb. .0455- —
l.c.l., works ..... lb. .048 - .0755
Aluminum acetate, basic soln., 24%, bbls., l.c.l. works lb. .14 - —
Chloride, com'l, anhyd., dms., c.l., works, frt. equald lb. .16 - —
l.c.l., works, frt. equald. lb. .16½- —
cryst., dms., c.l., works. 100 lbs. 16.00 - —
l.c.l., works ..... 100 lbs. 17.50 - —
soln. 32°, cbys, c.l., works lb. .0445- —
l.c.l., works ..... lb. .0520- .1290
tanks, works ..... 100 lbs. 3.45 - —
NF, gran., dms., works ..... lb. .29 - .30
Aluminum fluoride, tech., anhyd., bgs., c.l., works ..... lb. .16¾- —
l.c.l., works ..... lb. .17¼- .19¾
Aluminum fluoride in fib. dms. 0.35c. per lb. higher.
Formate, basic soln., dms., c.l., works lb. .12 - —
l.c.l., works ..... lb. .12½- —
Hydrate, heavy, bgs., c.l., frt. frt. equald lb. .032 - —
20,000-40,000 lb. lots, same basis lb. .0345- —
2,000-20,000 lb. lots, same basis lb. .0445- —
bulk, same basis ..... lb. .0295- —
Hydroxide, gel, pharmaceutical, 14-15%, Al_2O_3, fib. dms., works lb. .22 - —
contract, works lb. .21 - —
9-9½% Al_2O_3, fib. dms., works lb. .19 - —
contract, works lb. .18 - —
dried, USP, XIV, fib. dms., works lb. .82½- —
contract, works lb. 79½- —
tech., powder (see Aluminum hydrate).
Metal, 99%+, ingots, 10,000-lb. lots, frt. alld lb. .2710- —
pigs, 10,000-lb. lots, frt. alld. lb. .2500- —
Oxide, amorphous (see Alumina, calcined).
Paste, lining, extra-fine, dms lb. .63 - —
standard grade, dms ..... lb. .48 - —
Aluminum powder, lining extra, fine, dms lb. 1.09 - —
standard grade, dms ..... lb. .78½- —

Aluminum powder and paste prices are f.o.b. shipping point. Add 1c per lb for 100-lb dm., 1½c. per lb for 50-lb dm., 3c. per lb. for 10-lb can and 5c. to 12c per lb for smaller containers. Deduct 1c. per lb. for single shipment of 400 to 1,499 lbs., 2c. for 1,500 to 4,999 lbs., 3c. for 5,000 to 29,999 lbs. and 4c. for 30,000 lbs. or more. Where destination is within the continental U. S. a deduction equivalent to the lowest available common carrier transportation rate will be made from seller's invoice on orders of 200 lbs. or over.

Resinate, precip., 2.1% Al, dms., 100 lbs. 7.26 - —
Stearate, dibasic, ctns., c.l lb. .37 - —
l.c.l. ..... lb. .39 - .42
monobasic, ctns., c.l ..... lb. .37 - —
l.c.l. ..... lb. .38 - .42
tribasic, ctns., c.l. ..... lb. .37 - —
l.c.l. ..... lb. .38 - .42
Sulfate, coml., bulk, c.l., works, 100 lbs 1.85 - —
grd., bgs., c.l., works ton 37.00 - —
lump, bgs., c.l., works ton 40.00 - —
Iron-free, bgs. c.l. works, frt. equald 100 lbs 3.55 - —
l.c.l., works, frt. equald. 100 lbs. 3.95 - 4.55
Prices 1 per ton higher in the South.
USP, gran., dms., works .. lb. .29 - .30
powd., dms., works ..... lb. .36 .37
Trihydrate, heavy (see Aluminum hydrate, heavy).



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Pfizer has recently increased the number of modern warehouses it maintains across the country in order to keep adequate stocks of its high quality chemicals within short haul of plants everywhere—North, South, East and West. Newest of these new warehouses are located in Dallas, Texas, and Portland, Oregon.

in large tonnage

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Ambergris, gray, bots.....oz. 8.00 -10.00
p-Aminoacetanilide, frt. alld. ....lb. 1.57 • —
Aminoazotoluene base, bbls., 100% basis lb. 1.03 - 1.18
Aminoethyl ethanolamine, dms., c.l., dlvd lb. .475 • —
l.c.l., dlvd ..... lb. .485 • —
tanks, dlvd..... lb. .45 • —
2-Amino-2-methyl-1-propanol, dms., c.l., frt. alld lb. .44 • —
l.c.l., frt. alld ..... lb. .45 • —
tanks, frt. alld..... lb. .42 • —
m-Aminophenol, dist., dms., ton lots. lb. 2.05 • —
smaller lots ..... lb. 2.50 • —
p-Aminophenol, dms., frt. alld .. lb. 1.15 • —
Aminophylline, USP 100-lb. dms lb. 3.55 • —
Ammonia, anhyd., fertilizer, tanks, works, frt. equald ton.75.00 • —
refrigeration, tanks, works, frt. equald ton.82.50 • —
aqueous, tanks, works, anhyd basis ton.83.00 • —
Ammoniacal liquor (see Ammonia, aqueous).
Ammoniac, sal, gray, bgs., c.l., works, frt. equald..100 lbs. 8.25 • —
l.c.l., same basis....100 lbs. 9.25 • —
white, gran. (see Ammonium chloride, tech.).
Ammonium acetate, purif., dms lb. .38 • —
Benzoate, USP, dms., kgs. 4,000-lb. lots frt. alld lb. .80 • —
smaller lots, frt. alld lb. .81 - 1.08
Biborate, gran., dms., c.l., works. ton.319.50 • —
ton lots, ex whse .....ton.397.00 • —
smaller lots, ex whse...ton.402.00 • —
Bicarbonate, dom., dms., c.l., work..100 lbs. 7.00 • —
l.c.l., works .....100 lbs. 9.00 • —
Bichromate, dms., works.... lb. .42 - .43
Bifluoride, dms., dlvd ..... lb. .2145- .2245
Bromide, NF gran., bbls..... lb. .43 • —
Powdered ammonium bromide 10c per lb. higher.
Carbonate, USP, lump, dms. .. lb. .16 • —
Chloride, tech., fine gran., bgs., c.l., works. 100 lbs. 5.75 • —
l.c.l., works .....100 lbs. 7.75 - 8.20
USP, gran., bbls., dms.... lb. .17¼- —
Citrate, dibasic, bbls..... lb. .77 • —
Dichromate (see Ammonium bichromate)
Fluoride (see Ammonium bifluoride).
Hydroxide (see Ammonia aqueous).
Hypophosphite, NF, dms. ..... lb. 3.07 • —
Iodide, NF, dms., bots ..... lb. 4.26 - 4.38
Linoleate, 80%, dms., works lb. .50 - .55
Nitrate dom., fert. grade, 33.5% N., bgs., western works, frt. equald, base price.. ton.64.00 • —
imp., Canadian, 33.5% N, eastern, bgs., c.l., ship't point, frt. equald to $8 per ton, base price..ton.64.00 • —
August discount..ton. 5.00 • —
western, bgs., c.l., f.o.b. cars, Los Angeles ton.79.69 • —
with dolomite, 20.5% N, bgs., Hopewell, Va..ton.51.00 • —
Oxalate, fine gran., dms .. lb. .26¼- .31
Pentaborate, gran., bgs., c.l., works..ton.187.50 • —
ton lots, ex whse .....ton.273.50 • —
smaller lots, ex whse....ton.278.50 • —
Ammonium pentaborate powder $10 per ton higher.
Persulfate, kgs..... lb. .38 - .47½
Phosphate, coml., bgs., c.l., works, frt. equald lb. .09¼- —
l.c.l., same basis ..... lb. .10 • —
dibasic, NF, V bbls., dms. lb. .40 • —
tech., bgs., c.l., works, frt. equald lb. .09¼- —
l.c.l., same basis ..... lb. .10 • —
Salicylate, NF, dms., kgs. ..... lb. 1.62 - 1.64
Silicofluoride, dms., works .. lb. .11¾- .13¼
Sulfamate, bgs., c.l., t.l., works lb. .18 • —
l.c.l., works ..... lb. .22 • —
Sulfate, coke-oven, bulk, producing ovens, base price.. ton.32.00 • —
syn., bulk, c.l., f.o.b. works ton.32.00 -42.00
purif., dms., works .... lb. .09 • .09½
Sulfide liq., 40-44%, tanks, frt. equald., 100% basis ton.160.00 • —
Sulfocyanide, tech. (see Ammonium thiocyanate).
Thiocyanate, tech., dms., c.l., works lb. .20 • —
l.c.l. works ..... lb. .22 • .26
Thioglycollate, coml., cbys., 100% basis lb. 1.35 - 1.65
highly purif., cbys., 100% basis. lb. 1.70 - 1.96
Thiosulfate, cryst., photo grade, 6lb dms., frt. alld .. lb. .65 • —
d-Amphetamine hydrochloride dibasic, bots. lb.28.00 • —
dl, dms ..... lb. 6.00 • —
d-monobasic, bots ..... lb.28.00 • —
d-Phosphate, dibasic, bots..... lb.28.00 • —
dl, dms ..... lb 6.00 • —
d-Sulfate, dms..... lb.28.00 • —
dl, dms ..... lb 6.00 • —
Amyl acetate, ex fusel oil, tech., dms. c.l., frt. alld. E. of Rockies lb. .18 • —
l.c.l., same basis..... lb. .19 • —
tanks, same basis ..... lb. 15½- —
ex pentane reg. dms., c.l., dlvd. lb. .18½- —
l.c.l., dlvd..... lb. .19½- —
tanks, dlvd..... lb. .16 • —
tech., dms., c.l., dlvd..... lb. .16½- —
l.c.l., dlvd..... lb. .17½- —
tanks, dlvd..... lb. .14 • —
syn., oxo process, dms., c.l., dlvd..lb. .19¾- —
l.c.l., dlvd..... lb. .20¾- —
tanks, dlvd..... lb. .18 • —
Alcohol (see Alcohol, amyl).
n-Butyrate, dms ..... lb. 1.00 - 1.25
Cinnamic, aldehyde, dms..... lb. 1.70 - 2.20
Nitrite, USP, bots ..... lb. 1.75 - 1.83
Salicylate, cns., dms..... lb. .82 - 1.10
o-tert-Amyl phenol, dms., c.l., works. lb. .49½- —
l.c.l., works..... lb. .50½- —
tanks, works..... lb. .47 • —
p-tert-Amyl phenol, dms., c.l., works. lb. .26¾- —
l.c.l., works..... lb. .27¾- —
tanks, works..... lb. .25¾- —
Anethole, NF, cns., dms..... lb. 1.60 - 1.80
tech., dms ..... lb. 1.10 - 1.15
Angelica root, dom., bls..... lb. .80 - .90
Aniline oil, dms., c.l., frt. alld.. lb. .22 • —
l.c.l., frt. alld..... lb. .23 • —
tanks, frt. alld..... lb. .21 • —
tankwagons, min. 2,000 gals. lb. .21½- —
Salt, dms, c.l. truckloads, 20,000 lbs., min. frt. alld.. lb. .33 • —
l.c.l., same basis..... lb. .35 • —
Anise seed, Mexican, bgs. ..... lb. No price.
Spanish, bgs. ..... lb. .26 • —
Syrian, bgs. ..... lb. .26 • —
Anisic aldehyde, bots., dms ..... lb. 1.95 - 2.70
o-Anisidine, dms., c.l., frt. alld... lb. .80 • —
l.c.l., same basis..... lb. .82 • —
tanks, same basis..... lb. .78 • —
p-Anisidine, dms., works..... lb. .97 • —
Annatto seed, whole, bgs ..... lb. .15 - .17

Anthracene, 90-95%, bbls., ton-lots, works lb. .83 • —
smaller lots, works ..... lb. .95 • —
Anthraquinone, 99.5%, bbls. c.l., frt. alld lb. .83 • —
l.c.l., same basis ..... lb. .86 • —
electrical grade, bbls., l.c.l., same basis lb. .91 • —
Antimony butter (see Antimony trichloride).
Metal, bulk, c.l., mines..... lb. .33 • —
cs., c.l., mines ..... lb. .33½- —
Oxide, bgs., c.l., frt. alld..... lb. .27 • —
l.c.l., frt. alld ..... lb. .28½- —
Sulfide, approx. 65%, bgs., dlvd lb. .23 - .26
Trichloride, anhyd., solid, pails. c.l., works lb. .41 • —
l.c.l., works..... lb. .43 • —
Antimony-potassium tartrate, tech., powd., dms. lb. .69½- .74½
USP, powd., dms ..... lb. .74½- .75½
Antipyrine, NF, 200-lb. bbls ..... lb. 3.50 • —
Apomorphine hydrochloride, USP, 5 oz. lots, bots oz.35.60 • —
Areca nuts, powd., bbls..... lb. .13 • —
Arecoline hydrobromide, NF, bots., tins oz. 4.50 - 6.00
l-Arginine monohydrochloride, dms. 1 kilo lots kilo.74.80 • —
Arnica flowers (true montana), bls. lb. 2.25 • —
Arsenic metal, lump, bbls. ex whse. lb. .54 • —
Trioxide, USP, dms ..... lb. .48 • —
White, powd., bbls., c.l., dlvd lb. .05½- —
l.c.l., dlvd..... lb. .06½- .07½

Asafetida, cn..... lb. .40 • —
powd., bbls., dms..... lb. .85 • —
Asbestine (see Talc, fibrous, N. Y.).
Asbestos, Canadian, crude, No. 1, c.l. (20 tons) mines..ton.1,400.00- —
No. 2, c.l. (20 tons), mines.ton.750.00 • —
Run-of-mine, c.l. (20 tons)... mines..ton.611.60 • —
3K, c.l. (20 tons), mines..ton.480.00 • —
3R, c.l., (20 tons) mines..ton.408.10 • —
3T, c.l. (20 tons), mines..ton.382.80 • —
3Z, c.l. (20 tons), mines..ton.353.10 • —
4K, c.l. (20 tons), mines..ton.190.30 • —
4M, c.l. (20 tons), mines..ton.190.30 • —
4T, c.l., (20 tons), mines..ton.171.60 • —
4Z, c.l. (20 tons), mines..ton.171.60 • —
5D, c.l. (20 tons), mines..ton.135.00 • —
5K, c.l. (20 tons), mines..ton.135.00 • —
5M, c.l. (20 tons), mines..ton.122.35 • —
5R, c.l. (20 tons), mines..ton.115.50 • —
6D, c.l. (30 tons), mines..ton.82.00 • —
7D, c.l. (30 tons), mines..ton.72.00 • —
7F, c.l. (30 tons), mines..ton.68.25 • —
7H, c.l. (30 tons) mines..ton.58.00 • —
7K, c.l. (30 tons), mines..ton.48.30 • —
7M, c.l., (30 tons), mines..ton.42.00 • —
7R, c.l. (30 tons), mines..ton.41.00 • —
7RF c.l. (30 tons), mines..ton.42.00 • —
7T, c.l., (30 tons), mines..ton.39.00 • —
7TF, c.l. (30 tons), mines..ton.42.00 • —
8S, c.l. (30 tons), mines..ton28.35 • —

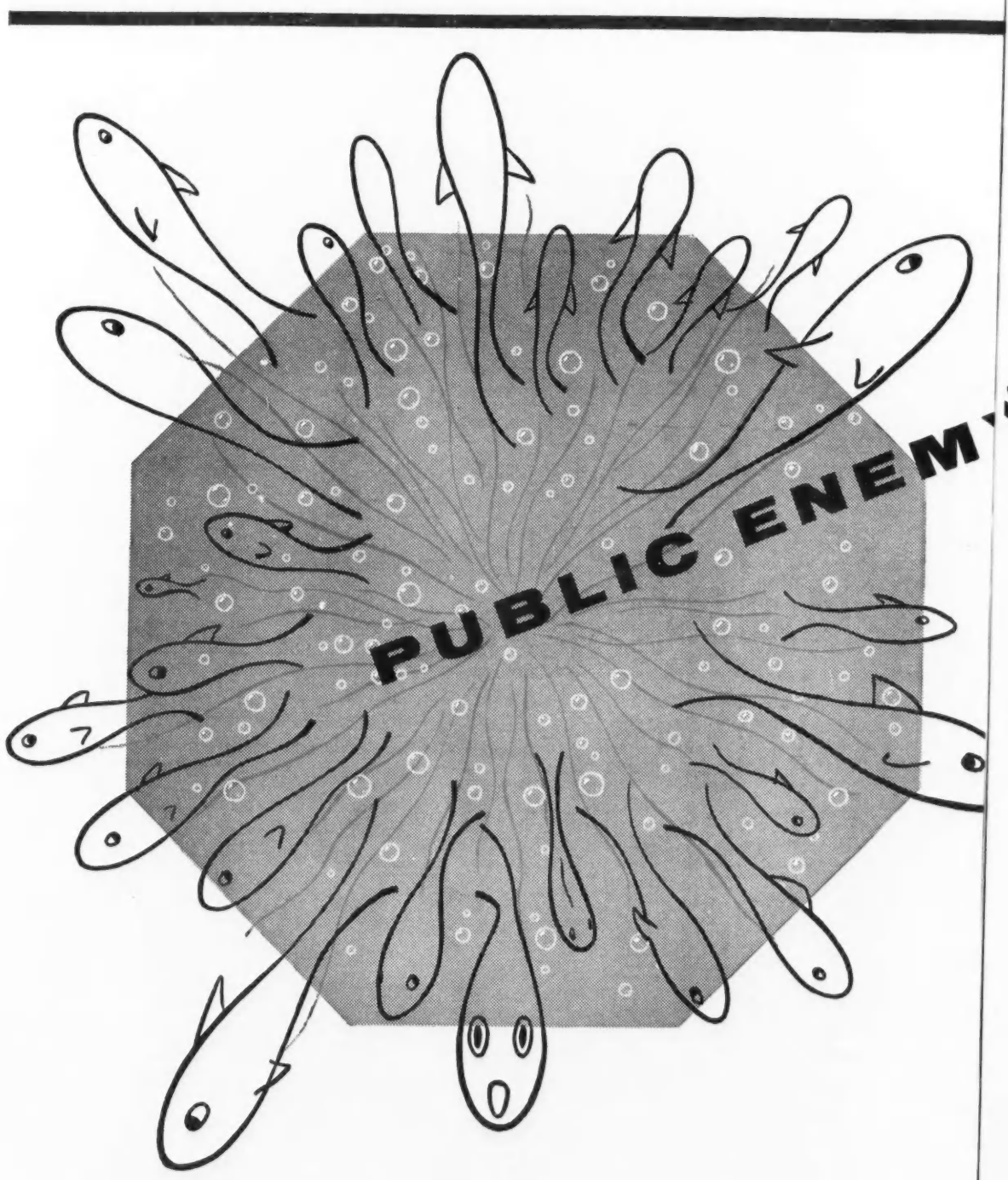
Asbestos c.l. prices are in U. S. funds, l.c.l. lots $4 per ton higher.

Asphalt, gilsonite, black jet, bgs., c.l., mines..ton.37.00 • —
select, 350° F. fusing pt., bgs., c.l., mines..ton.38.00 • —
270°-295°F., fusing pt., bgs., c.l., mines..ton.37.00 • —
seconds, 300°-390°F. fusing pt., bgs., c.l., mines..ton.32.00 • —

Asphalt, manjak, No. 10, crude, dms., works..lb. .06¼- —
Petroleum, cut-back, tanks, tankwagon, refy..gal. .09 • —
emulsion, tanks, tankwagon, refy. gal. .09½- —
steam-refd., 50-80 penetration, tanks, tankwagon, refy ton.21.00 • —
85-300 penetration, tanks, tankwagon, refy ton.20.00 • —
Aspirin, (see Acid acetylsalicylic).
Atropine, NF, bots..... oz. 3.90 - 4.50
Sulfate, NF, bots..... oz. 2.25 - 2.65

B

Bacitracin, bulk, 1,000,000,000 or more units 50,000 units. .70 • —
less than 1,000,000,000 units, 50,000 units. .75 • —
Balm of Gilead buds, dried, bgs lb. 1.35 - 1.45
Barberry root bark, bgs ..... lb. .28 - .30
Barbital, USP, 100-lb. dms..... lb. 4.50 • —
Sodium, USP, dms ..... lb. 4.75 - 4.77
Barium carbonate, precip., bgs., c.l., works ton.100.00 • —
smaller lots, works ton.110.00 • —
Chlorate, kgs., works ..... lb .32 - .36
l.c.l., t.l.l., frt. equald ton.285.00 • —
Chloride anhyd., bgs., c.l., works. ton.165.00 • —
l.c.l., works..... ton.175.00 • —
NF, cryst., dms..... lb. .20 • —
tech., cryst., bgs., c.l., works. 100 lbs. 6.50 • —
l.c.l., works..... 100 lbs. 7.00 • —
Chromate, bgs., frt. equald lb. .35 • —
Dioxide (see Barium peroxide).



S. B. PENICK & COMPANY 50 CHURCH ST., NEW YORK 8 735 W. DIVISION ST., CHICAG

Barium hydrate, cryst., bgs., c.l., t.l., frt. equald ton 208.00 - —
l.c.l., l.t.l., frt. equald ton 218.00 - —
Monoxide (see Oxide).
Nitrate, bbls., c.l., t.l., dlvd lb .16 - —
l.c.l., l.t.l., dlvd lb .17 - —
Oxide, grd., dms., c.l., t.l., frt. equald ton 275.00 - —
Peroxide, dms., frt. equald lb .20 - —
Stearate, ctns., c.l., frt. alld lb .39 - —
l.c.l., same basis lb .40 - .44
Sulfate, tech. (see Barytes and blanc fixe).
X-ray, dms lb .15 - .15½
Sulfide, dms., c.l., works ton 85.00 - —
l.c.l., works ton 95.00 - —
Barytes, Southern, off-color, bgs., mines ton 25.00 - —
95-75% bgs., mines ton 25.00 - —
water-grd., paper bgs., c.l., St. Louis ton 49.00 - —
ex-whse., N. Y. ton 70.85 - —
Bauxite, bulk, mines ton 6.75 - 10.00
Bay leaves (see Laurel leaves).
Belladonna, leaf, bls lb .35 - .37
root, bls lb .45 - .50
Bentonite, dom., 200 mesh, bgs., c.l., mines ton 14.00 - —
imp. Italian, white, high gel., bgs., 3-ton lots, ex whse ton 84.00 - —
1 ton lots, ex whse ton 87.00 - —
low gel., bgs., 5-ton lots, ex whse ton 82.35 - —
1 ton lots, ex whse ton 85.35 - —
Benzal chloride, chys., works lb .44 - —
Benzaldehyde, NF, dms lb .74 - 1.05
tech., chys., dms., t.l. lb .43 - —
smaller lots lb .44 - —
Benzene (See Benzol).
Hexachloride, 25% and 99% gamma isomer (see Lindane).
tech., high gamma, dms., c.l., dlvd., gamma unit-lb. .0075 - .008
l.c.l., works, gamma unit-lb. .009 - .0095
Benzene hexachloride, tech., low gamma, dms., c.l., dlvd., gamma unit-lb. .0075 - —
l.c.l., works, gamma unit-lb. .009 - —
Benzidine hydrochloride, bbls., c.l., frt. alld., 100% basis lb. 1.19 - —
l.c.l., same basis lb. 1.21 - —
Sulfate, tech., frt. alld., 100% basis lb. 1.21 - —
Benzocaine, dms lb. 3.48 - 3.50
Benzol, coaltar, pure or nitration, tanks, works:—
Bethlehem, Pa. gal. .36 - —
Birmingham district gal. .36 - —
Chicago district gal. .36 - —
Cleveland district gal. .36 - —
Geneva, Utah gal. .36 - —
Johnstown, Pa. gal. .36 - —
Lackawanna, N. Y. gal. .36 - —
Lone Star, Texas gal. .36 - —
Lorain, Ohio gal. .36 - —
Middletown, Ohio gal. .36 - —
Minnequa, Colo. gal. .36 - —
Philadelphia district gal. .36 - —
Pittsburgh district gal. .36 - —
Sparrows Point, Md. gal. .36 - —
Syracuse, N. Y. gal. .36 - —
Terre Haute, Ind. gal. .36 - —
Youngstown, Ohio gal. .36 - —
Benzophenone, dms lb 1.40 - 1.70
Benzotriazole, tech., dms., 1,000-lb. lots, works lb 2.25 - —
Benzotrichloride, cnys., 1,000-lb. lots or more, frt. equald lb. .18 - —
smaller lots, frt. equald lb. .20 - —
Benzoyl chloride, cbys., dms., c.l., works, frt. equald lb .22 - —
l.c.l., same basis lb .24 - —
tank trucks, dlvd. Metropolitan area lb .21 - —
Peroxide, purif., fib dms., 50 to 1,000-lb. lots, works lb .98 - 1.08
Benzyl acetate, f.f.c., cns., dms lb. .60 - 1.00
Alcohol (see Alcohol, benzyl).
Benzoate, USP, f.f.c., cns., dms lb. .72 - 1.10
Chloride, tech., 13-gal. cbys., dms., c.l., works, frt. equald. lb. .23 - —
l.c.l., same basis lb. .24 - —
tank trucks, dlvd. Metropolitan area lb. .21 - —
A 2½c differential is quoted on benzyl chloride in 5-gal. cbys. In steel dms prices were ½c lower.
Cinnamate, cns. lb. 3.60 - 3.90
Formate, cns. lb 1.80 - 2.10
Isoeugenol, cns. lb 9.85 - —
Propionate, bots. lb 1.35 - 1.65
Salicylate, bots. lb. 1.60 - 1.85
Benzylidine acetone, bots. lb. 1.75 - 1.80
Chloride (see Benzal chloride).
Berberine bisulfate, cns lb. 35.00 - 36.25
Hydrochloride, bots lb. 35.00 - 36.25
Betaine, anhyd., 10,000-lb. lots, frt. alld lb. 3.00 - —
Hydrochloride, 5,000-lb. lots, frt. alld lb. 1.60 - —
Monohydrate, 10,000-lb. lots, frt. alld lb. 2.60 - —
Betagammapicoline (see b.g-Picoline).
Betamethylnaphthalene (see b-Methylnaphthalene).
Betanaphthol (see b-Naphthol).
Betanaphthylamine (see b-Naphthylamine).
Betaphenylethylamine (see b-Phenylethylamine).
BHC (see Benzene hexachloride, technical).
Biotin, cryst., bots gram 10.00 - —
Biphenyl (see Diphenyl).
Bismuth chloride, fars lb 5.11 - —
Hydroxide, dms lb 4.65 - —
Metal, bxs, ton lots lb 2.25 - —
Nitrate, cryst., dms. lb 2.10 - 2.17
Oxide, anhyd., dms lb 4.47 - 5.05
Oxychloride, dms lb 4.37 - 4.42
Phenolsulfonate, fib dms lb 5.22 - —
Subcarbonate, USP, dms. lb 3.20 - —
Subgallate, NF, fib dms. lb. 3.15 - —
Subiodide, fib dms lb 5.37 - —
Subnitrate, NF, dms lb 2.65 - —
Subsalicylate, USP, dms lb 3.50 - —
Bismuth-ammonium citrate, USP, powd. jars lb 4.22 - —
Bisphenol-A, c.l., t.l., frt. alld lb. 29¾ - —
l.c.l., same basis lb. 30¾ - —
black acetylene, imp., bgs., c.l., duty and freight extra lb. .17 - —
cs., l.c.l., ex whse lb. .22½ - 26
Ash (see Barium sulfide).
Bone, dms, l.c.l. frt. alld lb .17 - 23¾
Pacific coast bone black prices 2c per lb. higher.
Carbon, channel, pigment, high color, beads, ctns., c.l., works, lb. .72 - —
l.c.l., dlvd. or whse lb. .78 - —
medium color, uncompressed, bgs., c.l., works, lb. .12 - —
l.c.l., dlvd. or whse, lb. .19 - —
rubber, beads, bulk, c.l., works lb. .07 - —
bgs., c.l., works lb. .074 - —
l.c.l., works lb 1225 - —
furnace, fast extruding, bgs., c.l., works lb. .06 - —
ctns., l.c.l., whse lb 10 - —
high abrasion, bulk, c.l., works, lb .0750 - —
bgs., c.l., works lb .0790 - —
l.c.l., dlvd. or whse lb. .122 - 125
high modulus, bgs., c.l., works, lb. .0550 - —
ctns., l.c.l., whse lb .0950 - —
semi-reinforcing, bgs., c.l., works lb .045 - —
bgs., ctns., l.c.l., whse lb .085 - —
Charcoal (see C).
Dyes (see Dyes).
Graphite (see G).
Iron oxide, pure, bgs., c.l., works, lb. 13¼ - —
l.c.l., works lb. 13½ - —
Lamp, bgs., c.l., works lb .16 - .45
Mineral, bgs., works lb .0160 - .0675
Blackberry, root bark, bls lb .45 - —
Black haw, root bark, bls lb .60 - .65
tree bark, bls lb. .45 - .50
Blanc fixe, dry, byproduct, bgs., c.l., works ton 190.00 - —
l.c.l., works ton 200.00 - —
direct process, bgs., c.l., works, ton 110.00 - —
l.c.l., works ton 120.00 - —
N. Y. whse ton 155.00 - —
Blood, dried, 16-16½% ammonia, unit-ton. 5.25 - —
high grade, unground, 16-17% ammonia, bgs., Chicago, unit-ton. 5.25 - —
soluble, bgs., c.l. lb. .13 - .14
t.l. lb. .15 - .17
l.t.l. lb. 15½ - .35½
Bloodroot, bls lb 48 - 50
Blue, alkali, dry, 250-lb. bbls. dlvd. N. of Penn. and N. C., E. of Miss. R. including St. Paul, Minneapolis, Davenport, Rock Island, St. Louis lb 2.10 - —
toner, 125-lb. bbls., litho flushed, same basis lb 1.20 - —
Chinese, bbls., c.l., same basis lb. .50 - —
l.c.l. ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Cobalt, genuine, bbls., same basis, lb 4.90 - —
Imitation (see Blue, ultramarine).
Dyes (see Dyes).
Iron (see Blue, Chinese, Milori, Potash, Prussian and Soda).
Methyl violet toner, molybdated, PMA, bbls., same basis lb 2.75 - —
tungstated, PTMA, bbls., same basis lb 4.00 - 4.15
Milori, bbls., c.l., same basis lb. .50 - .53
l.c.l., ton lots, same basis lb. .51 - .56
smaller lots, same basis lb. .52 - .57
Peacock, fugitive, 100% color strength, bbls., same basis, lb. .85 - —
Phthalocyanine, full strength, bbls., same basis lb. 3.45 - —
resinated, bbls., same basis lb. 3.00 - —
water dispersable, bbls., same basis lb. 1.54 - —
Potash, CP, bbls., same basis lb .56 - —
Prussian, insoluble, soluble, bbls., c.l., same basis lb. .50 - —
l.c.l. ton lots, same basis lb. .51 - —
smaller lots, same basis lb. .52 - —
Soda, CP, bronze, bbls., c.l., same basis lb. .50 - —
l.c.l., ton lots, same basis, lb. .51 - —
smaller lots, same basis, lb. .52 - —
Ultramarine, cobalt type, dry or pulp, bbls., same basis lb. .39½ - .33
jobbing types, bbls., same basis, lb. .19 - —
regular types, dry, bbls., same basis lb .22½ - .35
Victoria toner, molybdated, PMA, bbls lb 4.10 - —
tungstated, PTMA, bbls lb 5.35 - —
Blue dry colors, dlvd. prices ½c higher Ala., Fla., Ga., La. (Shreveport 1½c.), Miss., N. C., S. C., Tenn., Tex. (El Paso 2c), Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c higher. Pac. Coast, Denver, Pueblo, Salt Lake City, Wichita, frt. equalized with Chicago.
Blue vitriol (see Copper sulfate).
Bluestone (see Copper sulfate).
Bonemeal, steamed, works, E ton 60.00 - —
Los Angeles ton 82.50 - —
Bone phosphate, defluorinated (see Di of lime (see Calcium phosphate, tribasic).
precipitated (see Calcium phosphate tribasic, NF precip.)
Borax, tech., anhyd., 99%, bgs., c.l., works ton 80.50 - —
ton lots ex whse, N. Y. or Chi ton 132.25 - —
smaller lots, works ton 137.25 - —
bulk, c.l., works ton 71.50 - —
cryst., 99½%, bgs., c.l., works, ton 69.25 - —
ton lots ex whse, N. Y. or Chi ton 121.00 - —
smaller lots, same basis, ton 126.00 - —

NO. 1 IN FISHDOM!

When trash-fish glut rivers, streams and reservoirs economic loss and health hazards result unless counter-measures are taken. Penick's Pro-Noxfish® provides relief. Safely, quickly, economically, it wipes out the fish population so wanted species can be restocked and thrive without undue competition.

Pro-Noxfish combines a botanical derivative, rotenone, with Sulfoxide®, a patented pesticidal synergist perfected by Penick. It illustrates Penick's development in diverse fields, all revolving around a single hub . . . botanicals. Knowing how best to derive rotenone from derris root, we became the world's largest maker of fish toxicants. We lead in other pesticides as well.

Warfarin: Under its trade-name Dethmor®, Penick is the foremost manufacturer of this anti-coagulant developed by the Wisconsin Alumni Research Foundation as a highly effective weapon against rats.

Pyrethrum: Penick is a prime source, having plantations abroad and a quarter-century experience in importing and processing this fast, safe insecticide.

Ryania: This botanical insecticide attacks codling moths and sugar cane borers while encouraging beneficial insect species. Penick is the sole supplier.

These are notable in a complete range that includes: Allethrin, Malathion, Foliafume, DDT, Dieldrin, Chlordane, and Lindane and others. Their all-around superiority is the expected result of Penick's long experience, thorough research and careful chemical and biological quality control.

Insecticides, rodenticides and fish toxicants comprise another of the many fields in which Penick's world-wide resources and diverse laboratory and manufacturing facilities are important factors.

PENICK

Agricultural Chemical and Insecticide Division

Borax, tech., gran., decahydrate, 99½%, bgs., c.l., works, ton 43.25 - —
ton lots ex whse. N. Y. Chi ton 95.00 - —
smaller lots, same basis, ton 100.00 - —
bulk, c.l., works ton 36.75 - —
pentahydrate, 99½%, bgs., c.l., works ton 57.75 - —
ton lots ex whse. N. Y. ton 109.50 - —
smaller lots, same basis, ton 114.50 - —
bulk, c.l., works ton 51.50 - —
powd., 99½%, bgs., c.l., works, ton 48.25 - —
ton lots ex whse. N. Y. or Chi ton 100.00 - —
smaller lots, same basis, ton 105.00 - —
USP borax $15 per ton higher.

Bordeaux mixture, bgs., c.l., works, frt. alld. or nearest whse, pt. lb. .18 - .24
t.c.l., same basis lb. .19 - .26
Borneol, cns lb. 2.50 - 4.5
Boron trifluoride gas, cyls., truckload, works lb. .62 - —
t.t.l., works lb. .70 - —
Brazilwood extract (see Hypernic extract).
Brimstone (see Sulfur).

Bromine, purif, cs., c.l., t.l., dlvd. E. of Rockies lb. .32 - —
t.c.l., same basis lb. .34 - .39
ret. dms., c.l., t.l, dlvd E of Rockies lb. .31 - —
t.c.l., same basis lb. .31 - .33
tanks, same basis lb. .22½ - —
Bromochloromethane dms., c.l., frt. equald lb. .48 - —
t.c.l., same basis lb. .50 - —
Bromoform pharmaceutical grade, bots lb. 1.62 - 2.60
cbys. lb. 1.52 - —
Bromstyrol, bots lb. 5.40 - 5.70
Bronze powder aluminum (see A).
Brown, iron oxide pure bgs., c.l., works lb. .14¼ - —
t.c.l. works lb. .14½ - —
Oxide, metallic bgs., works lb. .04 - —
Sienna, burnt, paper bgs., c.l., works lb. .06¼ - .17¼
t.c.l., works lb. .06½ .17½
raw, paper bgs., c.l., works lb. .06¼ - .16¼
t.c.l., works lb. .06½ - .16½
Umber, burnt, American, c.l., works lb. .07 - .07¾
t.c.l., works lb. .07¼ - .08
Turkey type, bgs., c.l., Boston, Bethlehem Easton, Pa., Hiwassee, Va., N. Y. lb. .07¾ - —
raw, American, bgs., works lb. .07½ - .08¼
Turkey-type bgs. works lb. .06¾ - .07
Vandyke, bbls. works lb. .09½ - .12
Brucine, cns., 100-oz tots oz. .20 - .25
Sulfate, NF cns. 100-oz. lots oz. .15 - .20
Buchu leaves, bls lb. 1.30 - —

Butadiene, refd., cyls., c.l. refy lb. .21 - —
t.c.l., refy. lb. .22 - —
tanks, refy lb. .15 - —
Butane, indust., tanks, group 3 gal. .04¼ - —
n-Butyl acetate, ferment., dms., c.l., frt. alld lb. .16½ - —
t.c.l., same basis lb. .17½ - —
tanks, same basis lb. .14 - —
syn., dms., c.l., dlvd. E lb. .16½ - —
t.c.l., same basis lb. .17½ - —
tanks, same basis lb. .14 - —
sec-Butyl acetate, syn. dms., c.l., dlvd. E lb. .13½ - —
t.c.l., same basis lb. .14¼ - —
tanks, same basis lb. .11¾ - —
Butyl alcohol (see Alcohol, n-Butyl).
Aldehyde (see Butyraldehyde).
Chloride, dms., c.l., works lb. .37½ - —
t.c.l., works lb. .38¼ - —
Ether, dms., c.l. works lb. .33 - —
t.c.l., works lb. .33¾ - —
tanks, works lb. .31 - —
Lactate, dms., c.l., frt. alld. E. of Rockies lb. .42½ - —
t.c.l., same basis lb. .43½ - —
tanks, same basis lb. .40 - —
Laurate, dms., works lb. .39 - —
Methacrylate dms. c.l., t.l., works, lb. .55 - —
t.c.l., works lb. .55½ - —
Oleate, refd., dms., t.c.l., works lb. .32 - —
Phenylacetate, dms lb 4.50 - 4.60
Phthalate (se Dibutyl phthalate).
Stearate dms., c.l., frt. equald. t.c.l., same basis lb. .26½ - —
Butylamine (see mono-, di- and tri-). lb. .25 - —
6-tert-Butyl-m-cresol, dms., c.l., works lb. .55 - —
t.c.l., works lb. .56 - —
tanks, works lb. .54 - —
Butylated hydroxytoluene (see 2,6-Di-tert-butyl-p-cresol).

p-tert-Butylphenol, bgs., c.l., works, lb. .27½ - —
t.c.l. lb. .28½ - —
Butyraldehyde, dms., c.l., dlvd lb. .22 - —
t.c.l., dlvd lb. .23 - —
tanks, dlvd lb. 19½ —
Butyric ether (see Ethyl butyrate).

C

Cacao butter (see Cocoa butter).
Cadmium iodide 25-lb fib dms lb. 6.75 - 7.00
Metal ingots or sticks, cs., dlvd. lb. 1.70 - —
Caffeine, USP, nat., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, dms. 100-lib lots or more lb 2.80 - —
syn., cryst., anhyd., dms., 100-lb. lots or more lb. 3.00 - —
hydrous, 100-lb lots or more lb 2.80 - —
Citrated USP dms., 100-lb lots or more lb. 2.70 - —
Calamine, USP, dms lb. .34 - —
Calciferol, cryst., vials, 1-kilo lots, works gram. .60 - —
25 to 100 gram lots works. gram .65 - —
in edible oil (see Viosterol)
Calcium p-aminosallcylate, fib. dms., 100 lbs or more, frt. adjusted. lb 4.00 - —
Arsenate, dealers, bgs. c.l., frt. alld lb .09 - 09½
Bromide, NF, 100 lbs or more lb .92 - —
Carbide, standard generator size, dms., c.l., dlvd ton 134.40 - —
Carbonate, nat., dry-grd., air floated, 325 mesh, bgs., c.l., works ton 10.50 - —
chalk whiting 325 mesh bgs., c.l., works ton 32.00 -34.00
t.c.l., same basis lb. .10 - .10½
water-grd., ½ to 10 microns bgs., c.l., works ton 30 00 - —
10 to 20 microns, bgs. c.l., works ton 17 00 -18.00
precip dense, bgs., c.l., works ton 32.50 - —
t.c.l., works ton 42.50 - —
medium, bgs., c.l., works ton 38 00 - —
t.c.l., works ton 48 00 - —
surface treated, bgs., c.l., works ton 37.50 - —
t.c.l., works ton 47 50 - —
ultrafine, bgs., c.l., works, ton 110.00 -160 00
t.c.l., works ton 120.00 -175 00
Chloride, cryst., purif., dms lb 27 - —
flake, 77-80%, paper bgs., c.l., works, frt. equald ton 29 00 - —
liquor, 40%, tanks, frt. equald ton 12.35 - —
pellets bgs., c.l., works ton 35.40 - —
powd., bgs., c.l., works ton 35.00 - —
solid, 73-75%, dms., c.l., frt. equald ton 27.50 - —
t.c.l., works, frt. equald, ton 34.00 -71.00
USP, gran, dms. lb. .32 — —
Chromate, bgs., frt. equald lb. .29½ - .30
Cyanide, dms., c.l., dlvd. E. of Rockies lb. .20 - —
t.c.l., same basis lb. .24 - .55
Cyclamate, 100-lb. fib, dms lb. 2.95 - —
Gluconate, AA, bbls., dms lb. .74 - .76
USP bbls., dms lb. .67 - .69
Hydride, dms., works lb. 2.15 - 3.00
Hypochlorite, high test, 45-lb. cs., dlvd. E. of Rockies cs. 22.95 -25.10
100-lb. dms., same basis dm. 30.80 -34.50
Hypophosphite, dms., ton lots or less lb. .90 - .93
Iodide, jars lb. 4.52 - —
Lactate NF, dms., 10,000-lb. lots or more works lb. .36 - .40
Mandelate, USP dms. works lb. 2.10 - 2.25
smaller lots, works lb. .41 - .48
Naphthenate liq. 4% Ca., dms., frt equald lb. .27¼ - —
Nitrate, fertilizer grade, bgs., c.l., Los Angeles ton 46.00 - —
tech., 5-dm. lots, works lb. .13 - —
Pantothenate, dms., bots., frt. adjusted gram, .045 - —
Para-aminosalicylate (see Calcium p-Aminosalicylate)
Phenolsulfonate, dms lb .70 - —
Phosphate, dibasic, USP bgs., c.l., frt. equald 100 lbs. 7.75 - —
t.c.l., frt. equald 100 lbs 8.50 - —
feed grade, 18½%P, bgs., c.l., t.l., frt equald ton 79.55 -83.25
t.c.l., frt. equald ton 89 55 -93 25
21% P, bgs., c.l., t.l., frt. equald ton 94.50 —
t.c.l., frt. equald ton 99.50 -104.50
monobasic, bgs., 10,000-lb. lots, frt. equald 100 lbs. 6.90 - —
smaller lots, same basis, 100 lbs. 7.40 - —
tribasic, NF precip., bgs., c.l., works, frt. equald 100 lbs. 8.75 - —
t.c.l., frt. equald 100 lbs 9.00 - —
Phytate, bgs., works lb. .50 - —
Resinate precip, dms. frt. alld., works lb. .30½ - —
Silicate, hydrated, bgs., c.l., works, lb. .06 - —
t.c.l., works lb. 06½ - —
paint grade (see Wollastonite)
Stearate ctns., c.l. lb. .37 - —
t.c.l lb. .38 - .42
Sulfate (see Gypsum)
Calomel, USP, powd., dms lb. 3.42 - —
Camphene 46° m.p., dms., incl., c.l., works lb. .15 - —
t.c.l., same basis lb. .16½ - —
tanks, same basis lb. .12½ - —
Chlorinated, 67-69% (see Toxaphene).
Camphor, monobromated, NF, dms., kgs lb. 3.55 - —
nat. USP, powd., cs., 100-lb lots, lb. .60 - .65
tablets, 1-oz., ½-oz. cs lb. .85 - .90
syn., tech., 1 bbl or more lb. .48 - —
USP, gran., powd., bbls., 2,000-lb. lots lb. .59 - —
1,000-lb. lots lb. .60 - —
smaller lots lb. .61 - —
tablets, tins, 2,000-lb. lots lb. .90 - —
1,000-lb. lots lb. .91 - —
smaller lots lb. .92 - —
Canada balsam (see Fir balsam).
Cantharides, Chinese, cs lb. 2.00 - 2.05
powd., bxs lb. 2.25 2.30
Russian, bgs lb. 4.00 4.05
powd., bxs lb. 4.35 - 4.40
Capsicum (see Pepper red).
Oleoresin, NF, from domestic pepper, dms lb. 4.50 - 5.25
from African pepper, dms lb. 4.35 - 5.00
Caraway seed, Dutch, bgs. lb. .17 - —
Carbazole, 97%, bbls., ton lots, works lb. 1.05 - —
Carbon black (see Black, Carbon).
Dioxide, indust., wholesale, bulk, dlvd, Metropolitan area ton 73.00 -115.00
ton 73.00 -115.00
cyls., same basis lb. .08 - .09
solid, same basis lb. .035 - .040
Disulfide, 55-gal. dms., c.l., works, frt. equald. to competitive points lb. .07 - —
t.c.l., same basis lb. .08½ - .09
5-gal dms., 30 dms. to c.l., same basis lb. .13 - —
less than 30 dms lb. .16 - —
tanks, dlvd. lb. .0545 —

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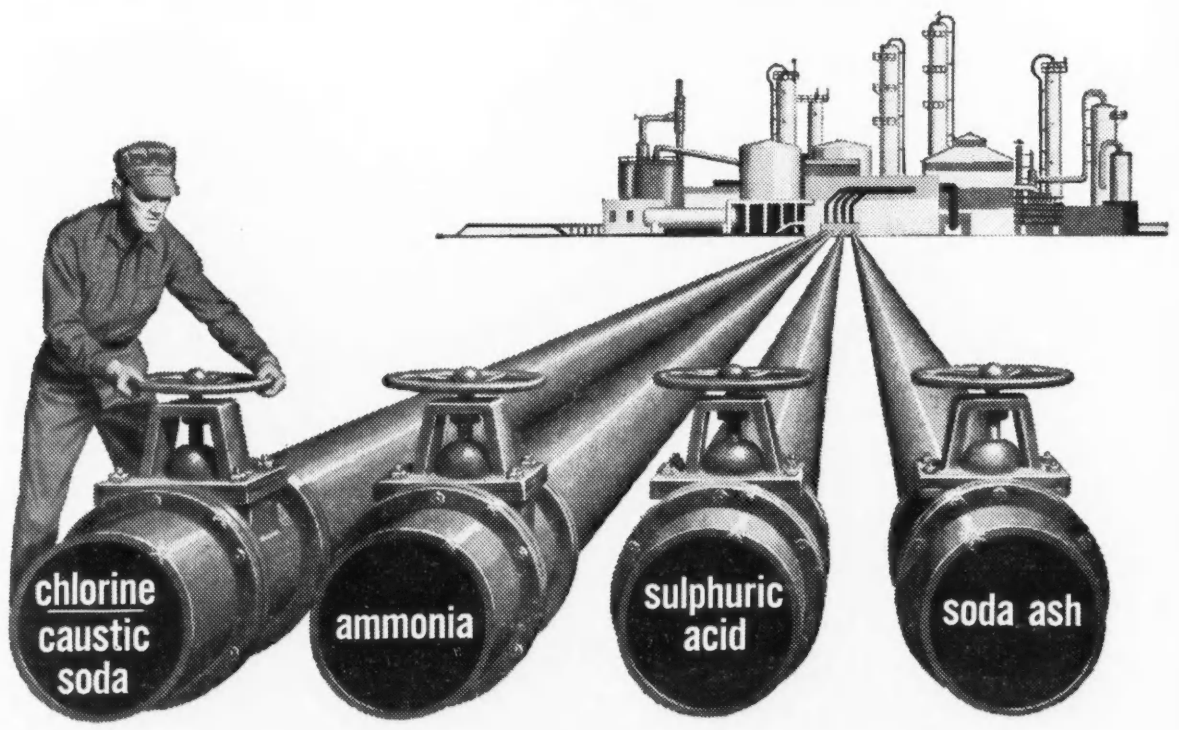
36, Avenue William-Favre, Geneva, Switzerland

Carbon tetrachloride, CP, consumers, dms., l.c.l., frt. alld. lb.	.14¼-	.14½
tech., consumers, dms., c.l., frt. alld. lb.	.11¼-	—
l.c.l., frt. alld. lb.	.13½-	—
tanks, frt. alld. lb.	.10 -	—
Carboxymethyl cellulose (see CMC).		
Carbromal, NF, dms., 100-lb. lots, works lb.	4.00 -	4.25
smaller lots, works lb.	4.10 -	4.75
Cardamom seed, bleached, "A" lb.	3.20 -	—
"B" lb.	3.10 -	—
decorticated, Ceylon, cs. lb.	3.00 -	—
Guatemalan, cs. lb.	2.85 -	—
green, Alleppey, bgs. lb.	2.15 -	—
Ceylon, bgs. lb.	2.15 -	—
Carmine, No. 40, NF, bulk, 100-lb. lots or more, dlvd. lb.	16.80 -	—
smaller lots, dlvd. lb.	16.90	-17.30
Carotene, tech., 1,350,000 A units per gram, tins, 5-10 kilo lots, dlvd gram.	.295 -	—
in carrot oil, 5,000,000 to 8,000,000 A units per lb., dms., works million units.	.12 -	—
microcrystalline in oil, 400,000 A units per gram, dms., dlvd. million units.	.21 -	—
b-Carotene, pure, crystalline, 1,600,000 A units to 1,670,000 per gram., cns gram.	.35 -	—
in vegetable oil, 400,000 A units per gram, cns. gram.	.064 -	—
Carvol, bots lb.	4.50	8.00
Cascara sagrada bark, bulk lb.	.33 -	—
Casein, dom. acid precip., standard, bgs. 10,000-lb. lots or more, shipt. point lb.	.32	Nom.
premium, bgs., 10,000-lb. lots or more, shipt. point lb.	.38	Nom.
imp., acid-precip., grd., Argentine, bgs., c.l., duty paid lb.	.23½-	.24
New Zealand, duty paid lb.	.24 -	.25
Cashewnut shell liquid, treated, dms., c.l., Newark, N. J. lb.	.22 -	—
ton lots, same basis lb.	.23 -	—
dm. lots same basis lb.	.25 -	—
Cassia, Batavia, "A," bls. lb.	.22 -	—
"B" lb.	.21 -	—
"C" lb.	.20 -	—
Corinje "A" lb.	.22 -	—
"B" lb.	.21 -	—
"C" lb.	.20 -	—
Castor beans, bgs., f.o.b. Brazil ton.	170.00	Nom.
Oil (see Oil, castor).		
Pomace, bgs., c.l., works ton.	35.00	-40.00
Castoreum, nat., cns lb.	5.25	-30.00
syn., cns lb.	9.00	—
Catechol, CP, cryst., fib, dms., works lb.	2.17½-	—
resub., dms., works lb.	4.29½-	—
Catnip leaves, Southern, bls lb.	.75 -	—
Celery seed, French, bgs. lb.	.41 -	—
Indian, bgs. lb.	.19 -	—
Cellulose acetate, flake, powd., ctns., bgs. 100-lb. lots or more, dlvd E lb.	.35 -	.46
Acetate-butyrate, powd., 17% butyryl content, bgs., dlvd. E. lb.	.545 -	.555
27% butyryl content, bgs., dlvd. E lb.	.595 -	.605
38% butyryl content, bgs., dlvd. E lb.	.545 -	.555
50% butyryl content, bgs., dlvd E lb.	.595 -	.595
half-second, bgs. dlvd. E. lb.	.545 -	.555
Scrap (see Pyroxylin scrap).		
Cerium chloride, dms., dlvd. lb.	.35 -	—
Hydrate 74% CeO_2, fib dms., 100-lb lots or more lb.	1.44 -	—
77% CeO_2 fib dms., 100-lb. lots or more lb.	1.74 -	—
Oxalate, NF, bgs., works lb.	1.00 -	—
Oxide, optical grade, bgs., 50-lb. lots or more, dlvd lb.	1.85 -	1.98
smaller lots, dlvd lb.	2.03 -	2.23
Chalk (see Calcium carbonate).		
Chamomile flowers, Hungarian style, cs lb.	.78 -	—
Roman, cs. lb.	2.00 -	—
Charcoal, activated, NF, fib, dms., c.l., works lb.	.25 -	.32
5-ton lots, works lb.	.26½-	.32½
smaller lots works lb.	.27 -	.50
Bone (see Black, bone).		
Hardwood, bulk, lump, c.l., f.o.b. plant ton.	55.00 -	—
briquets, bulk, c.l., f.o.b. plant. ton.	75.00	-80.00
5 lb. paper bags, c.l., same basis ton.	108.00 -	—
10 lb. paper bags, c.l., same basis ton.	95.00	-98.00
25 lb. paper bags, c.l., same basis ton.	82.00	-88.00
40-lb. paper bgs., c.l., same basis ton.	81.00	-85.00
Pinewood, gran., bgs., c.l., works, South ton.	57.00 -	—
l.c.l., works, South ton.	57.00	-67.00
lump, bgs., c.l., works, South ton.	53.50 -	—
l.c.l., works, South ton.	56.50	-71.00
bulk, c.l., works, South ton.	38.00 -	—
t.l., works, South ton.	41.00 -	—
Chestnut extract, Italian, solid, 60% tannin, bgs. exdock, plus duty lb.	.09¼-	—
powd., 70% tannin, bgs., exdock, plus duty lb.	.10⅝-	—
Chloral, tech. 94% min. dms., c.l., works lb.	.23 -	—
l.c.l., works lb.	.24 -	—
tanks, multiple units, 5 cars, works lb.	.21 -	—
Hydrate, USP, 40 lb. jars, 1,000-lb. lots lb.	1.00 -	—
500-lb lots lb	1.03 -	—
100-lb. lots or less lb	1.05 -	—
Chloramine T, NF, bbls, works lb.	75	1.00
Chlordan, agricultural dms. c.l., frt alld lb.	.65 -	—
t.c.l. 5,000 to 10,000-lb. lots, frt alld lb.	.66 -	—
clarif., dms., c.l., frt alld lb.	.69 -	—
l.c.l. 5,000 to 10,000-lb. lots, frt alld lb.	.70 -	—
Chlorinated paraffin, 42%, dms., c.l., frt alld lb.	.16¼-	—
t.c.l. same basis lb.	.17¼-	—
70%, dms., c.l., same basis lb.	.18¾-	—
l.c.l. same basis lb.	.19¾-	—
Rubber, 5, 10, 20 cps. ctns., c.l., works lb.	.55 -	—
l.c.l., works lb.	.56 -	—
125, 1,000 cps., ctns., c.l., works. lb.	.65 -	—
l.c.l., works lb.	.66 -	—
Chlorine, liq., cyls., c.l., works, frt equald lb.	.10¼-	—
t.c.l., Metropolitan area lb.	.11¾-	.13
tanks, single units, works, frt. equald 100 lbs.	3.15 -	—
multiple units, 5 cars, works, frt. equald 100 lbs.	4.05 -	—
3 cars, same basis 100 lbs.	4.25 -	—
2 cars, same basis 100 lbs.	5.25 -	—
1 car, same basis 100 lbs.	7.25 -	—
4-Chloro-2-aminotoluene, fused, bbls. lb.	1.45 -	—
m-Chloroaniline, dms., min. 10,000 lbs. or over, frt. alld. lb.	.75 -	—
less than 10,000 lbs., same basis lb.	.80 -	—
tanks, same basis lb.	.73 -	—
o-Chloroaniline, dms., c.l., frt. alld. lb.	.65 -	—
l.c.l., same basis lb.	.67 -	—
tanks, same basis lb.	.63 -	—
p-Chloroaniline, dms. c.l., frt. alld. lb.	.77 -	—
l.c.l., same basis lb.	.79 -	—
o-Chlorobenzaldehyde, dms., t.l., works lb.	1.05 -	—
l.t.l., works lb.	1.20 -	—
p-Chlorobenzaldehyde, dms., c.l., works lb.	1.95 -	—
Chloroform, tech., dms., c.l., dlvd. E lb.	.18 -	—
l.c.l., same basis lb.	.19 -	—
tanks, same basis lb.	.17 -	—
USP, dms lb.	.30 -	—
2-Chloro-4-nitroaniline, paste, dlvd. E., 100% basis lb.	.81 -	—
powd., dlvd. E., 100% basis lb.	86 -	—
4-Chloro-2-nitroaniline powd. dlvd. E lb.	.80 -	—
o-Chlorophenol, dms. c.l., frt. equald. lb.	.37 -	—
l.c.l., same basis lb.	.38 -	—
p-Chlorophenol, dms., c.l., frt. equald. lb.	.37 -	—
l.c.l., same basis lb.	.38 -	—
Chloropicrin, coml., bots lb.	1.50 -	—
cyls., 180 lbs., frt. alld. lb.	.95 -	—
100 lbs., same basis lb.	.97 -	—
25 lbs., same basis lb.	1.22 -	—
Choline bitartrate, fib, dms., frt. adjusted lb.	1.25	1.35
Chloride, fib, dms., frt. adjusted. lb.	1.25	1.35
Dihydrogen citrate, fib, dms., frt. adjusted lb.	1.25	1.35
Chromium acetate, soln., 7⅛%, bbls., works lb.	.09¼-	—
cbys., works lb.	.11¼-	—
Fluoride, bbls., works lb.	.51 -	.52
Green (see Green, chrome).		
Oxide (see Green chromium oxide).		
Trioxide NF, bots lb.	.82 -	.89
Yellow (see Yellow chrome).		
Cinchona bark, NF, red, broken, bgs lb.	.35 -	.40
yellow broken, bgs lb.	.35 -	.40
Cinnamic alcohol (see Alcohol cinnamic).		
Aldehyde, cns., dms lb.	.95 -	1.25
Cinnamon, Ceylon, No. 2, bgs lb.	.90 -	.91
"0000", bgs., afloat lb.	1.07 -	—
Citral, bots., cns lb.	4.90 -	5.90
Citronellal, bots., dms lb.	2.85 -	3.50
Citronellol, bots., dms. lb.	4.30 -	4.60
Civet, artif, bots lb.	13.75	-15.00
nat., bots oz.	8.50	-15.00
Clay, ball, dom., airfloated, bgs., c.l., Tenn ton.	19.50 -	—
crushed, shed moisture, bulk, c.l., Tenn ton.	10.00 -	—
purif., bgs., c.l., Tenn ton.	20.50 -	—
imp., airfloated, bgs., c.l., Atl. port long-ton.	42.00	-45.00
lump, bulk Atl. port long-ton.	27.00	-30.20
China, dom., dry-grd., airfloat, 99% 325 mesh, bgs., c.l., Georgia, works ton.	10.00 -	—
l.c.l., Georgia, works ton.	15.50 -	—
300 mesh., bgs., c.l., Georgia, works ton.	13.50	-14.50
l.c.l., same basis ton.	35.00	-36.00
Clay, China, imp., white, lump, bulk, c.l., ex-dock, Phila., Portland, Me. gross ton.	20.00	-35.00
powd., bgs., c.l., ex dock net ton.	50.00	—
l.c.l., ex whse net ton.	60.00	-65.00
Clove, Madagascar, bgs lb.	.42½-	—
Zanzibar, bgs lb.	.47 -	—
CMC, crude, 96%, low or medium, vis. bgs., or fib dms., 23,000 lbs., dlvd E., 100% basis lb.	.39½	41
less than 23,000 lbs., dlvd E., 100% basis lb.	.41½	43
65%, low or medium vis., bgs., or fib. dms., c.l., dlvd. E., 100% basis lb.	.39½-	.41
l.c.l. dlvd E. 100% basis lb.	.41½-	.43
purif., high vis (see Gum Cellulose).		
standard, low or medium vis., bgs., 23,000 lbs. or over, works, frt. alld lb.	.55 -	—
smaller lots, same basis lb	.57 -	—
CMC prices W. of the Rockies are 2c. per lb. lower and are on a works basis.		
Coaltar, crude, resale for solns., dms., c.l., ex-whse gal.	.255 -	—
l.c.l., ex-whse gal.	.275	—
tanks, ex works gal.	.155	159
refd., resale, dms., c.l., ex-whse. gal.	.2650-	.32
l.c.l., ex-whse gal.	.2350-	.34
tanks, ex-whse gal.	.1650-	.1760



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Cobalt acetate, 23.7%, dms., dlvd. lb. 1.20 - —
Carbonate, 46% powd., bgs., dlvd. lb. 1.85 - —
Chloride, 24.2% Co. dms., dlvd. lb. 1.20 - —
Hydrate 60-61% Co., dms., dlvd. lb. 2.62 - —
Linoleate, fused, 8½% Co., dms. lb. .75¼- —
liq., 6% Co. dms lb. .61 - —
Metal, 97-99% kgs. ex whse lb. 2.60 - —
Naphtenate, liq., 6% Co., dms., dlvd lb. .48¼- —
Nitrate, 20.1% Co., bbls., dlvd. lb. 1.00 - —
Oxide, black, 72½-73½% Co., kgs lb. 1.96 - —
70-71% Co., kgs lb. 1.90 - —
Phosphate, powd. 32.1% Co., kgs., dlvd lb. 1.69 - —
Resinate, fused 3% Co., dms. lb. .29¾- —
Sulfate cryst., 21% Co., dms., dlvd lb. .79 - —
monohydrated, 33% Co., dms., dlvd lb. 1.32 - —
Tallate, 6% Co., dms., dlvd lb. .43¾- —
Cocaine, USP, cns., 100-oz. lots oz. 17.80 - —
Hydrochloride, cns., 100-oz. lots. oz. 13.75 - —
Cocilana bark, bls. lb. .25 - —
Cocoa butter, bgs. lb. .62 - .65
Codeine, NF, cns. 100-oz. lots oz. 13.25 - —
Hydrochloride, cns., 100-oz. lots. oz. 11.75 - —
Phosphate, USP, cns., 100-oz. lots. oz. 10.25 - —
Sulfate, USP, cns., 100-oz. lots oz. 10.75 - —
Codliver oil (see Oil, codliver).
Cohosh root, black, bls lb. .20 - .22
blue, bls lb. .20 - .22
Colchicine, USP, bots., cns. oz. 29.00 -35.50
Colchicum root, bls. lb. .35 - —
seed, bgs. lb. .60 - —
Collodion, USP, dms. lb. .32½- —
flexible, dms. lb. .34 - —
Colocynth, pulp, bls. lb. .55 - —
Colombo root, bls lb. .15 - .16
Condurango bark, bales lb. .26 - —
Copaiba balsam, cns., dms. lb. .85 - —
Copper acetate, bbls., c.l., works lb. .53 - —
l.c.l., works lb. .54 - —
Carbonate, 55%, bgs., c.l., works. lb. .35¾- —
l.c.l., works lb. .37¾- —
Chloride, anhyd., dms., works lb. .45¼- .45¾
cryst., dihydrate, dms., works. lb. .30¾- .31¼
dried, dms., works lb. .39 - .39½
Cyanide, tech., bbls., 20,000-lb. lots or more lb. .77½- —
1,000-lb. lots or more lb. .78½- —
smaller lots lb. .80½- —
Gluconate, dms lb. 3.15 3.35
Hydrate, dms., c.l., frt. alld. E. of Miss lb. .52½- —
l.c.l., same basis lb. .53 - —
Metal, electrolytic, dlvd., Valley basis lb. .36 - —
Naphthenate, liq., 8% Cu, dms., frt. alld lb. .24½- —
Nitrate tech., cryst., bbls., works. lb. .33¼- —
Oleate, solid, 9% Cu dms., works lb. .45 - —
Oxide, black, bbls., 100-2,000-lb. lots, works lb. .54 - —
red, 97%, USN Type I, bbls., 100-5,000 lb. lots lb. .64½- —
90% USN Type II, bbls., 100-5,000 lots or more, works. lb. .62½- —
Oxychloride, dms., c.l., works lb. .53 - —
l.c.l., works lb. .53½- .63½
Quinolinolate, tin, dms lb. 4.25 4.50
Resinate, precip., dms., frt. alld. lb. .31½- —
Sulfate, CP, gran., dms., works. lb. .2080- —
cryst., 99%, bgs., c.l., works. 100 lbs. 13.90 - —
l.c.l., same basis 100 lbs. 14.90 -16.90
monohydrated, 35%, dms., c.l., works 100 lbs. 23.75 - —
l.c.l., works 100 lbs. 24.50 - —
tribasic, dealers, bgs., c.l., works, frt. equald 100 lbs. 30.00 - —
l.c.l., same basis 100 lbs. 31.00 -34.00
Undecylenate, dms lb. 2.00 4.00
Copra, Atlantic, Gulf ports, c.i.f. ton. 160.00 - —
Pacific ports, c.i.f. ton. 155.00 - —
Coriander seed, Moroccan, bgs lb. .12 - —
Roumanian, bgs lb. .09 - .09½
Yugoslavian, bgs lb. .08½- —
Corn sugar, tanners, chipped, paper bgs., c.l., 60,000 lbs. min. 100 lbs. 7.26 - —
l.c.l. 100 lbs. 7.51 - —
Syrup, 42°, non-ret., dms., c.l. 100 lbs. 7.34 - —
l.c.l. 100 lbs. 7.49 - —
Corrosive sublimate (see Mercuric chloride).
Cortisone acetate, NNR bulk gram 3.50 3.55
Cottonseed meal, 41% bgs., Memphis ton. 57.00 -58.00
Cramp bark, NF bls lb. .85 .9
Coumarin, NF, cryst., dms lb. 3.60 - —
Cream of tartar (see Potassium bitartrate).
Creosote carbonate, NF, bots, cbys. lb. 3.05 3.20
Coaltar, crude, tanks, works, frt. adjusted gal. .22 - —
soln. 80%, tanks, works gal. .2068- —
refd., dms., c.l., works gal. .42 - .44
l.c.l., same basis gal. .53 - .55
tanks, same basis gal. .33 - .35
Wood, beachwood, cbys., dms lb. 1.60 - 1.65
hardwood, NF, bots., cbys lb 1.30 1.35
pinewood, dms., c.l., incl lb. .0561 - —
l.c.l., incl lb. .0634- —
N. Y. whse lb. .0745- —
tanks, works lb. .0460- —
Cresol, tech., 50% below 204°C., dry above 207°C., wide distillation range, non-ret., dms., c.l., frt equald lb. .1625- —
l.c.l., same basis lb. .1675- —
tanks, same basis lb. .145 - —
USP, non-ret., dms., c.l., same basis lb. .1775- —
l.c.l., same basis lb. .1825- —
tanks, same basis lb. .160 - —
m-Cresol, 95-98% dms., c.l., works. lb. .60 - —
l.c.l., works lb. .61 - —
m-p-Cresol, 5-95%, 3°C., dms., c.l., frt. equald lb. .1775- —
l.c.l., same basis lb. .1825- —
tanks, same basis lb. .160 - —
2-97%, 2°C., dms., c.l., frt. equald. lb. .2175- —
l.c.l., same basis lb. .2225- —
tanks, same basis lb. .200 - —
o-Cresol, m.p. over 30°C., ret., dms., c.l., frt. equald lb. .16¼- .16¾
l.c.l., same basis lb. .16¾- .17¼
tanks, same basis lb. .14½- .15
29°C., ret., dms., c.l., frt. equald. lb. .15¾- —
l.c.l., same basis lb. .16¼- —
tanks, same basis lb. .14 - —
25-29°C., dms., c.l., frt. equald. lb. .14¾- —
l.c.l., same basis lb. .15¼- —
tanks, same basis lb. .13 - —

p-Cresol, 98% dms., c.l., dlvd. lb. .50 - —
l.c.l., dlvd lb. .51 - —
tanks, dlvd lb. .49 - —
Methyl ether, cns. lb. 1.80 - 2.05
Crotonaldehyde, 91-93%, dms., l.c.l., works lb. .24¼- .25
Cryolite, nat., indust., bgs., c.l., works 100 lbs. 13.00 - —
l.c.l., works 100 lbs. 14.25 - —
Cube root, powd., 5% rotenone, bgs., c.l., t.l., works lb. .29 - —
Cubeb berries, XX, NF, bgs lb. .70 - —
powd., cs lb. .85 - —
Cumene, dms., c.l., works lb. .12 - —
l.c.l., works lb. .14 - —
tanks, works lb. .11 - —
l.c.l., works lb. .30 - —
Cumin seed, Iranian, bgs lb. .13½- .14
Moroccan, bgs lb. .22 - .23
Turkish, bgs. lb. N.P.
Cutch extract, 55% tannin, bgs., ex dock, duty extra lb. .08½- —
Cyanamide, fertilizer mixing grades, 21% N, gran., bgs., Niagara Falls, Ont., contract ton. 55.00 - —
pulv., 21% N, bgs., works, unit-ton. 2.75 - —
Indust. grade, bgs., c.l., works ton. 75.00 - —
l.c.l., works ton. 96.00 - —
6-16 mesh, dms., c.l., works ton. 120.00 - —
l.c.l., works ton. 140.00 - —
Cyclohexane, 99% tech., dms., c.l., works gal. .70 - —
l.c.l., works gal. .72 - —
tanks, works gal. .55 - —

Cyclohexanol, tech., dms., c.l., works, frt. alld., E. lb. .28 - —
l.c.l., works, same basis lb. .29 - —
tanks, works, same basis lb. .24 - —
Cyclohexanone, tech., dms., c.l., works lb. .32½- —
l.c.l., works lb. .35 - —
tanks, works lb. .29 - —
Cyclohexene, min. 98% b.r., 82.5°C-85°C, 360-lb. dms., c.l., works lb. .55 - —
l.c.l., same basis lb. .60 - —
tanks, same basis lb. .52 - —
Cyclohexylamine, dms., c.l., works. lb. .46½- —
l.c.l., works lb. .48½- —
tanks, works lb. .45 - —
Cyclopropane CP, 2-lb. cyls., works. cyl. 48.00 - —
6 oz. cyls., works cyl. 12.00 - —
USP, hospitals, cyls., 40-gal. lots, gal. .38 - —
100-gal. lots gal. .37 - —
200-gal. lots gal. .36 - —

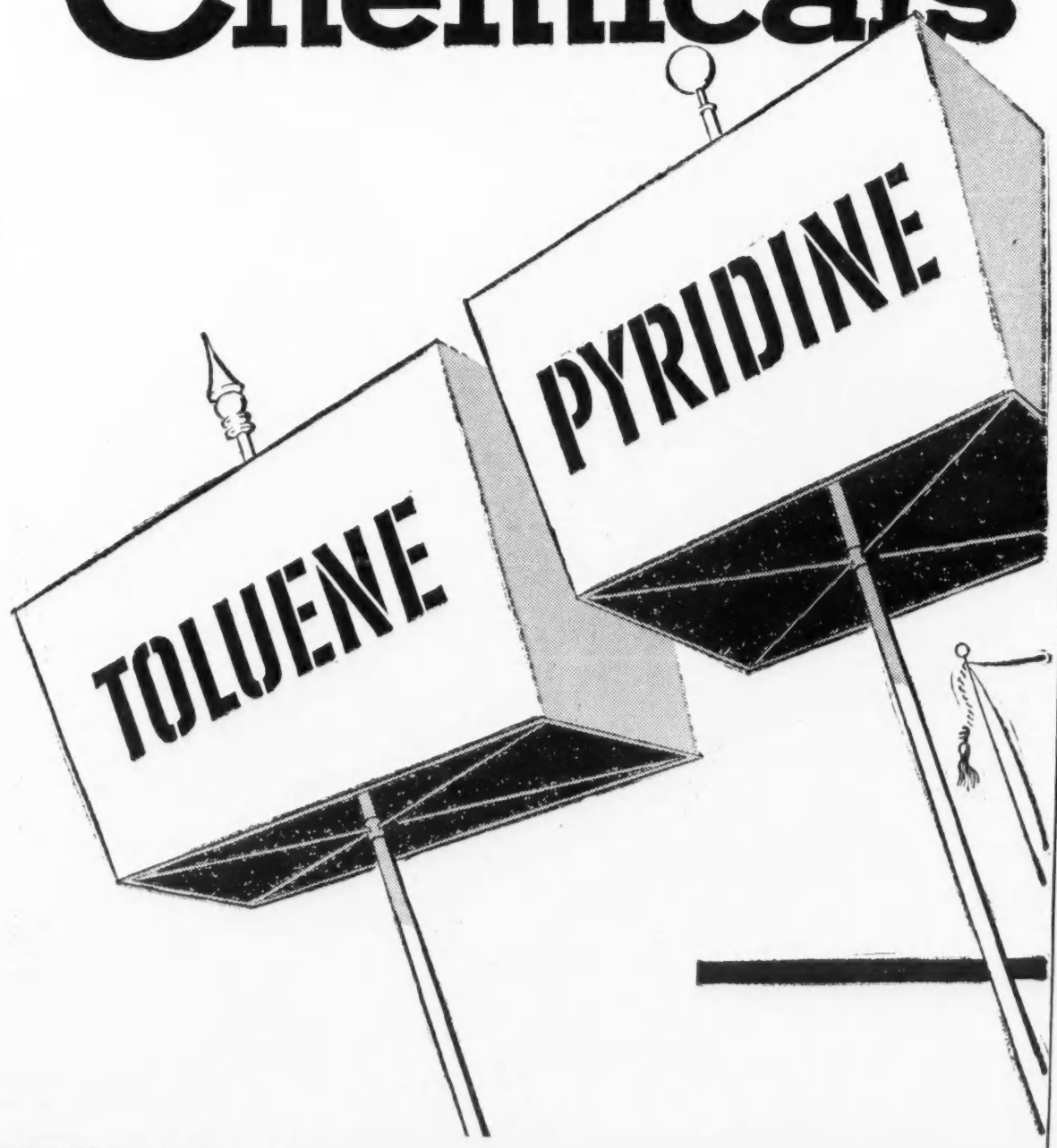
D

2-4-D, tech., dms., c.l., works, frt. equald lb. .37 - —
l.c.l., same basis lb. .42 - .46
Butyl ester, dms., c.l., works. lb. .40 - —
l.c.l., same basis lb. .45 - .49
tanks, same basis lb. .39 - —
Isopropyl ester, dms., c.l., works. lb. .40 - —
l.c.l., works lb. .45 - .49
tanks, works lb. .39 - —

Dandelion root, bls lb. .32 - —
DDD, tech., flake, grd, fib, dms., c.l., works lb. .45 - —
l.c.l., works lb. .46 - —
DDT powder, bgs., c.l., works, frt. equald lb. .23 - .27
smaller lots, same basis lb. .24 - .28
fib, dms., c.l., same basis lb. .24 - .28
smaller lots, same basis lb. .25 - .29
1-Decanol, tech., dms., c.l., dlvd lb. .41 - —
l.c.l. dlvd. lb. .43 - —
tanks, dlvd. lb. .38½- —
Deertongue leaves, bls lb. .45 - —
Defluorinated phosphate, feed grade, 13% P, paper bgs., c.l., t.l., works ton. 49.50 - —
17%P, paper bgs., c.l., t.l., works ton. 58.00 - —
18% P, paper bgs., c.l., t.l., works ton. 64.10 - —
Prices of defluorinated phosphate in bulk $3 per ton less than bag carlot prices.
Degras, neutral, bbls lb. .23 - .25
d-Desoxyephedrine hydrochloride, bots lb. 24.00 -25.00
dl, bots lb. 6.50 - —
Dextrin, corn, gum, paper bgs., c.l. 100 lbs. 9.28 - —
l.c.l. 100 lbs. 9.43 - —
canary, dark, paper bgs., c.l. 100 lbs. 9.12 - —
l.c.l. 100 lbs. 9.27 - —
light, paper bgs., c.l. 100 lbs. 9.02 - —
l.c.l. 100 lbs. 9.17 - —
white, paper bgs., c.l. 100 lbs. 8.86 - —
l.c.l. 100 lbs. 9.01 - —
Corn dextrin in cotton bgs. 15c. per 100 lbs. higher.
Potato, imported, bgs lb. .10½- .11

leading the parade

USS Chemicals

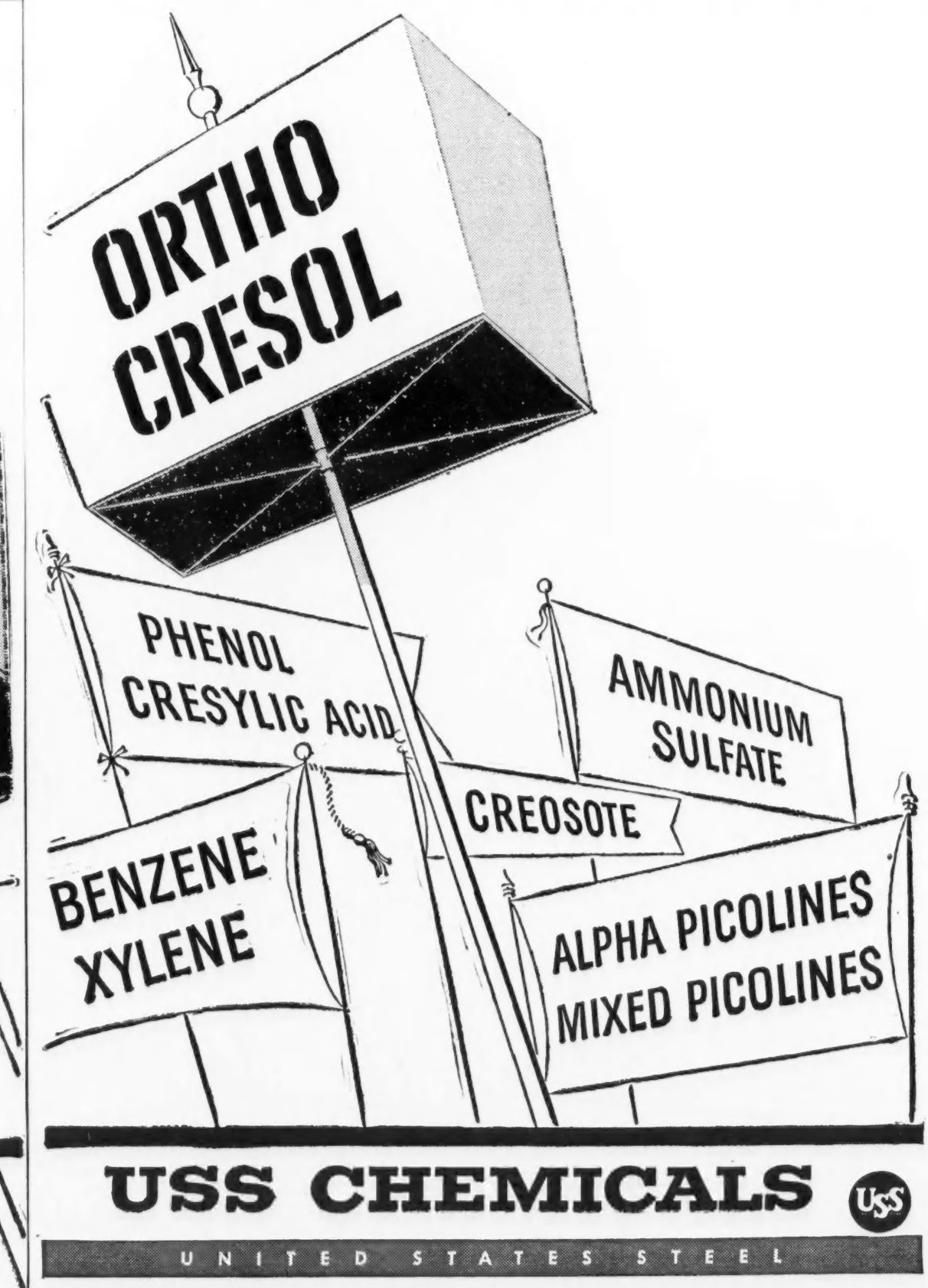


Dextrose, USP, dms	lb.	.17¾	—
Diacetone (see Alcohol diacetone).			
Diacetyl, flavor grade, bots	lb.	4.25	5.50
Di-sec-amyl phenol, dms., c.i., works	lb.	.32	—
l.c.l., works	lb.	.33	—
tanks, works	lb.	.29½	—
Di-tert-amyl phenol, dms., l.c., works	lb.	.32	—
l.c.l., works	lb.	.33	—
tanks, works	lb.	.29½	—
o-Dianisidine fib, dms	lb	2.00	—
Dibenzyl sebacate, dms., c.l., works.	lb.	.89¾	.90
l.c.l., same basis	lb.	.90¼	.91
tanks, same basis	lb.	.88	—
p-Dibromobenzene bgs., 500-lb. lots.	lb.	.55	—
Dibutyl phthalate, dms., c.l., dlvd, E	lb.	.32½	—
l.c.l., same basis	lb.	.33½	—
tanks, same basis	lb.	.30	—
Sebacate, dms., c.l., works	lb.	.66	—
l.c.l., works	lb.	.66½	.67
tanks, works, dlvd	lb.	.64	.64½
Tartrate dms works, frt. alld	lb.	.64	—
Dibutylamine, dms., c.l., dlvd	lb.	.55½	—
l.c.l., same basis	lb.	.56½	—
tanks, same basis	lb.	.53	—
2,6-Di-tert-butyl-p-cresol, food grade, dms., t.l. c.l., dlvd	lb.	1.20	—
l.t.l., dlvd	lb.	1.24	—
tech., dms., c.l.	lb.	.91	—
l.c.l.	lb.	.95	—
tanks	lb.	.86	—
Dicaprvl phthalate, dms, c.l., dlvd	lb.	.31	.32
l.c.l., dlvd	lb.	.32	.33
tanks, dlvd	lb.	.29½	—
Sebacate, dms., c.l., works	lb.	.63	—
l.c.l., works	lb.	.63½	.64
tanks, works	lb.	.61	—

2,5-Dichloroaniline, dms., works	lb.	.83	—
o-Dichlorobenzene, dms., c.l., frt. alld, E	lb.	.12¼	—
l.c.l. same basis	lb.	.13¼	—
tanks, same basis	lb.	.10¾	—
p-Dichlorobenzene, dms., c.l., frt. alld E	lb.	.14½	—
l.c.l., same basis	lb.	.17	—
1,4-Dichlorobutane, dms, c.l. or t.l., works	lb.	.33½	—
l.c.l., or t.t.l., works	lb.	.34	—
tanks, works	lb	.32	—
Dichlorodiphenyltrichlorothane (see DDT).			
Dichloropentanes, dist., dms., c.l., works	lb.	.05	—
l.c.l., works	lb.	.06	—
tanks works	lb.	.03	—
Dicyclohexylamine dms, c.l., works.	lb.	.51	—
l.c.l. works	lb.	.51¾	—
tanks, works	lb.	.49½	—
Dicyclohexyl phthalate, fib, dms., c.l. works, frt alld	lb.	.58½	.59
l.c.l. same basis	lb.	.59¼	.60
Didecyl phthalate dms., c.l., works.	lb.	.34	—
l.c.l. same basis	lb.	.35	—
tanks, same basis	lb.	.31½	—
Dieldrin dms frt alld	lb	1.80	—
l.c.l., frt. alld	lb.	1.85	—
Diethanolamine, dms., c.l., dlvd E	lb.	.27	—
l.c.l., same basis	lb.	.28	—
tanks, same basis	lb.	.24½	—
Diethyl carbonate dms., c.l., frt. alld	lb.	.47	—
l.c.l. same basis	lb	.48	—
tanks, same basis	lb.	.45	—
Ethanolamines, dms, c.l., dlvd	lb.	.69½	—
l.c.l., dlvd	lb.	.70½	—
tanks dlvd	lb	.67	—
Oxalate dms., c.l., frt. alld	lb	.42	—
l.c.l. same basis	lb	.43	.45
tanks same basis	lb	.40	—

Diethyl phthalate, dms., c.l., dlvd.	lb.	.30	.30½
l.c.l., dlvd.	lb.	.31	.31½
tanks, dlvd.	lb.	.27½	.28
Sulfate, dms., c.l., works	lb.	.19	—
l.c.l. works	lb.	.19¾	—
tanks, works	lb.	.17	—
Diethylamine, dms., c.l. dlvd. E	lb.	.51	—
l.c.l., same basis	lb.	.52	—
tanks, same basis	lb.	.48½	—
N,N-Diethylaniline, dms., c.l., frt. alld	lb.	.57	—
l.c.l., same basis	lb.	.58	—
tanks, same basis	lb.	.55	—
Di-2-ethylhexyl adipate (see Dioctyl adipate).			
Phthalate (see Dioctyl phthalate).			
Diethylene glycol, dms. c.l. dlvd E.	lb.	.17¾	—
l.c.l., same basis	lb.	.18¾	—
tanks, same basis	lb.	.15¼	—
Boriborate, dms. l.c.l.	lb.	.31	—
Diethyl ether, dms., c.l., works.	lb.	.47½	—
l.c.l., works	lb.	.48¼	—
Monobutyl ether, dms., c.l., dlvd. E	lb.	.30¾	—
l.c.l., dlvd. E	lb.	.31¾	—
tanks, dlvd. E	lb.	.28¼	—
Acetate, dms., c.l., works.	lb.	.30¼	—
l.c.l., works	lb.	.31	—
tanks, dlvd E	lb.	.28¼	—
Monoethyl ether, dms., c.l., dlvd	lb.	.22½	—
l.c.l., dlvd	lb.	.23½	—
tanks, dlvd	lb.	.20	—

Diethylene glycol monoethyl ether acetate, dms., c.l., works	lb.	.27¼	—
l.c.l., works	lb.	.28	—
tanks, dlvd E	lb.	.25¼	—
Monomethyl ether dms., c.l., dlvd	lb	.20½	—
l.c.l., dlvd	lb.	.21½	—
tanks, dlvd.	lb.	.18½	—
Diethylenetriamine, dms., c.l., dlvd E	lb.	.44	—
l.c.l. dlvd E	lb.	.45	—
tanks, dlvd E	lb	41½	—
Diethylstilbestrol, USP, bots., 10 kilo lots	kilo	100 00	147 50
1 kilo lot	kilo	110 00	152 50
Digitalis leaves USP dom. dms.	lb.	1.20	—
Digitoxin, USP, bots	gram	4.75	5.25
Diglycol laurate, dms	lb.	.32¼	.34
Stearate, dms., ton lots	lb.	.26	.28
Dihexyl sebacate dms., c.l., works.	lb	64	—
l.c.l. works	lb	64½	.65
tanks works	lb	62	—
Dihydrazine sulfate, dms., works.	lb.	1.10	1.25
Dihydrostreptomycin hydrochloride, bulk	gram.	.07	.0750
Sulfate, bulk	gram.	.07	.0750
1,2-Dihydroxy anthraquinone, dms., works	lb	2.75	—
4,2-Dihydroxy-5-5-dichloro-diphenyl methane, pure, dms	lb	2.55	—
tech. dms	lb	1.09	—
Di-isobutyl ketone dms, c.l. dlvd	lb.	.17	—
l.c.l., dlvd	lb.	.18	—
tanks, dlvd	lb.	.14½	—
Phthalate dms., c.l., dlvd. E	lb.	.31½	—
l.c.l. same basis	lb.	.32½	—
tanks same basis	lb.	.29	—
Di-isobutylene, dms., c.l., dlvd. E	lb.	.10	—
l.c.l. dlvd E	lb.	.11	—
tanks, dlvd E	lb.	.08	—
Di-iso-octyl phthalate, dms., c.l., dlvd	lb.	.31	—
l.c.l., same basis	lb.	.32	—
tanks, same basis	lb.	.28½	—
Sebacate, dms., c.l. works	lb.	.63½	—
l.c.l., works	lb.	.64½	—
tanks works	lb	61	—
Di-isopropanolamine, dms., c.l., dlvd.	lb.	.23¼	—
l.c.l. same basis	lb.	.24¼	—
tanks, same basis	lb.	.20¾	—
Di-isopropylamine dms, c.l., dlvd E. of Rockies	lb.	.50½	—
l.c.l. same basis	lb.	.51½	—
tanks, same basis	lb	48	—
Dill seed, dewhiskered, bgs	lb.	.09¼	—
nat., bgs.	lb.	.08	—
Dimethyl anthranilate, cns	lb	4.35	5.10
Chloroacetal dms, c.l. works	lb	45	—
l.c.l. works	lb	50	—
tanks works	lb	40	—
Ethanolamines, anhyd., dms., c.l., dlvd	lb.	1.225	—
l.c.l. dlvd	lb.	1.235	—
tanks, dlvd.	lb	1.20	—
70% dms, c.l., dlvd., 100% basis, contained amines	lb	68½	—
l.c.l. dlvd., 100% basis	lb	.69½	—
tanks, dlvd 100% basis	lb	66	—
Hydroquinone, dms.	lb	2.20	2.25
Phthalate, dms., c.l., works	lb.	.31	—
l.c.l., works	lb.	.32	—
tanks, works	lb.	.28½	—
Sebacate dms., c.l. works	lb	1.275	—
l.c.l. dlvd	lb	1.285	—
tanks works	lb	1.25	—
Sulfate, 55-gal ret. dms., c.l., works	lb.	.15	—
l.c.l. works	lb	16	—
10-gal ret dms. l.c.l. works.	lb	.16½	—
Dimethylamine 25% soln. dms., c.l., frt equald	lb	42	—
l.c.l. frt equald	lb	42½	—
tanks frt equald	lb	33	—
40% soln. dms. c.l. frt. equald	lb	.39	—
l.c.l frt equald	lb	.39½	—
tanks frt. equald	lb	33	—
N,N-Dimethylaniline dms., c.l., frt. alld	lb.	.32	—
l.c.l., frt. alld	lb.	.33	—
tanks, frt. alld	lb.	.30	—
N,N-Dimethylformamide dms. works	lb	.34	.39
tanks works	lb	33	—
2,4-Dinitroaniline, dms., 1,000-lb. lots, same basis, frt. equald	lb.	.68	—
smaller lots, frt equald	lb.	.71	—
m-Dinitrobenzene, 85°C., dms	lb.	.22	—
89°C., dms	lb	24	—
2,4-Dinitrochlorobenzene, crystallizing at 46½°C., dms., c.l., frt alld, E	lb.	.15¼	—
l.c.l., frt. alld E	lb.	.15¾	—
tanks, frt. alld E	lb.	.15	—
2,4-Dinitrochlorobenzene, crystallizing at 48°C., dms, c.l., frt. alld. E	lb.	.20¼	—
l.c.l. frt alld. E	lb.	.20¾	—
tanks, frt. alld. E	lb.	.20	—
2,4-Dinitrophenol, bbls	lb.	.37	—
2,4-Dinitrotoluene, oily, dms	lb	.11	—
refd., 63°C., dms	lb	.23	—
Dioctyl adipate, dms., c.l., works.	lb.	.42½	—
l.c.l., works	lb.	.43½	—
tanks, works	lb.	.40	—
Phthalate, dms., c.l., frt. alld	lb.	.31	—
l.c.l., frt. alld.	lb.	.32	—
tanks, frt. alld.	lb.	.28½	—
Sebacate, dms., c.l., works	lb.	.60½	—
l.c.l., works	lb.	.61½	.62¼
tanks works, dlvd	lb.	.58	.58½
smaller lots, frt. alld	lb.	.63	—
1,4-Dioxane, dms., c.l., works	lb	.29¾	—
l.c.l., same basis	lb	.29¼	—
tanks, same basis	lb	.27	—
Dip oil (see Tar acid oil).			
Dipentaerythritol, bgs., l.c.l., works	lb.	.35	—
Dipentene dest-dist., dms., c.l., works	gal.	.47	—
l.c.l., works	gal.	.52	—
ex-whse.	gal.	.62	—
steam-dist., dms., c.l., works, South	gal.	.59	—
dlvd. N. Y	gal.	.67	—
tanks, works, South	gal.	.45	—
Diphenyl, bbls., c.l., works	lb.	.15	—
l.c.l., works	lb.	.16	—
Diphenyl in bags ¼c. lower.			
Oxide, perfume grade, cns	lb.	.56	.61
Phthalate, dms., c.l., works	lb.	.51¾	—
l.c.l., works	lb	.53¾	—
Diphenylamine, refd., flake, bgs., c.l., works, frt, equald	lb.	.33	—
l.c.l., works, frt. equald	lb.	.35	—
fused, tanks, works, frt. equald	lb.	.31	—
tech., fused, tanks, works, frt. equald	lb.	.30	—
Diphenylguanidine, bgs., dms., ton lots, frt. alld	lb.	.52	—
smaller lots, frt. alld.	lb.	.53	—
Diphenylhydantoin-sodium USP.	dms	lb	5 00	5 60
Dipropylene glycol, dms., c.l., frt. alld	lb.	.17¼	—
l.c.l., same basis	lb.	.18¼	—
tanks, same basis	lb.	.15¼	—
Monomethyl ether, dms., c.l., dlvd. E	lb.	.20	—
l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.18½	—



Di-o-tolylguanidine, dms., ton lots, frt. alld	lb.	.62	—
smaller lots, frt. alld	lb.	.63	—
Divi-divi, 45% tannin, bgs., bls., c.l., U S ports, exdock	ton.	70.00	72.00
Divinylbenzene 20-25% dms., c.l., works, frt. equald	lb.	.20	—
l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.19	—
50-60% dms., c.l., works, 100% basis	lb.	1.00	—
l.c.l., works, 100% basis	lb.	1.05	—
Dodecylbenzene, dms., c.l., frt. alld	lb.	.14	—
l.c.l. same basis	lb.	.15	—
tanks, same basis	lb.	.12	—

Dyes, coaltar, certified colors for food, drugs and cosmetics, 500-lb. and 1-lb. lots, dlvd:—

Blue, FD & C, No. 1	lb.	15.65	17.60
No. 2	lb.	15.65	17.60
Green, FD & C, No. 1	lb.	15.65	17.60
No. 2	lb.	19.60	22.85
No. 3	lb.	21.30	35.90
Red, FD & C, No. 1, cns	lb.	5.90	7.85
No. 2	lb.	3.30	4.10
No. 3	lb.	19.60	22.85
No. 4	lb.	5.55	7.50
Violet, FD & C, No. 1, cns	lb.	15.65	17.60
Yellow, FD & C, No. 1, cns	lb.	9.15	11.05
No. 5	lb.	3.30	4.10
No. 6	lb.	3.30	4.10

Dyes, coaltar, certified colors for drugs and cosmetics, 200 lb. and 1 lb. lots, dlvd:—

Black, D&C, No. 1	lb.	10.50	10.95
Brown, D&C, No. 1	lb.	15.65	16.10
Green, D&C, No. 5	lb.	15.65	16.10
No. 6	lb.	15.65	16.10
No. 7	lb.	14.35	14.80

Dyes, coaltar, certified colors for drugs and cosmetics, 1-lb. lots, works, 25-50 lb. lots, dlvd:—

Orange, D&C, No. 3	lb.	10.50	10.95
No. 4	lb.	19.60	20.05
No. 5	lb.	5.25	5.70
No. 17	lb.	10.50	10.95
No. 18	lb.	23.55	24.00
No. 19	lb.	15.60	15.45
No. 21	lb.	3.10	3.60
No. 22	lb.	10.50	10.95
No. 24	lb.	24.20	24.65
No. 33	lb.	17.00	17.45
Violet, D&C, No. 2	lb.	15.65	16.10
Yellow, D&C, No. 7	lb.	10.50	10.95
No. 8	lb.	10.50	10.95
No. 10	lb.	13.05	13.50
No. 11	lb.	13.05	13.50

Dyes, coaltar, certified colors for drugs and cosmetics, external use, 1-lb. lots, works, 25-50 lb. lots, dlvd:—

Blue, Ext., D&C, No. 1, cns	lb.	15.65	16.10
Green, Ext., D&C, No. 1, cns	lb.	15.65	16.10
Red, Ext., D&C, No. 1, cns	lb.	13.05	13.50
Yellow, Ext., D&C, No. 1, cns	lb.	10.50	10.95

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd. No.

20 Chrysoidine Y, dustless	lb.	.89	—
27 Fast light, orange 2G	lb.	1.09	—
31 Phloxine 2G	lb.	.89	—
36 Yellow 2G	lb.	1.00	—
40 Orange R extra, conc	lb.	1.29	—
57 Fuchsine 6B	lb.	1.31	—
79 Scarlet 2R	lb.	.98	—
151 Orange AD	lb.	.67	—
161 Orange RR	lb.	.80	—
176 Fast red A	lb.	1.18	—
179 Rubine XX, conc	lb.	1.25	—
180 Blue F4B	lb.	1.11	—
183 Brilliant scarlet 3RU, conc.	lb.	1.02	—
202 Chrome blue black R, conc.	lb.	.91	—
561 Brown B	lb.	2.45	—
581 Black EB, 200%	lb.	1.13	—
203 Chrome black T	lb.	.54	—
208 Fast blue SR	lb.	1.10	—
216 Chrome red B	lb.	.92	—
234 Brown Y	lb.	1.08	—
246 Blue black, extra, conc	lb.	1.16	—
275 Milling red 3R, conc	lb.	1.62	—
289 Navy blue 3R, conc	lb.	1.44	—
299 Black F, conc	lb.	1.86	—
304 Neutral black 2B, conc.	lb.	2.21	—
326 Fast scarlet 4BNC	lb.	1.80	—
332 Bismark brown RX, conc., dustless	lb.	1.16	—
365 Brilliant yellow, conc	lb.	3.11	—
382 Scarlet B	lb.	2.20	—
401 Diazo black BHD	lb.	.79	—
406 Blue 2B, extra conc	lb.	1.30	—
419 Red FC	lb.	1.23	—
420 Brown M	lb.	1.19	—
448 Red 4BX, conc	lb.	1.43	—
518 Diamine sky blue FF, extra, conc	lb.	1.65	—

Dyes, coaltar, for general use in cloth dyeing (numbers are those of the Colour Index scale or prototype), contract, dlvd., No.

593 Green BY, conc	lb.	.67	—
596 Yellow Brown K, extra	lb.	1.07	—
620 Yellow 2G	lb.	1.11	—
639 Fast Yellow GG	lb.	1.97	—
640 Yellow XX	lb.	1.95	—
655 Yellow OX	lb.	2.24	—
657 Green V	lb.	2.31	—
662 Brilliant green G	lb.	3.07	—
667 Milling green 6B, conc	lb.	4.05	—
671 Blue EG	lb.	1.68	—
681 Crystal violet powder	lb.	2.15	—
698 Violet 6BN Powder	lb.	1.91	—
720 Brilliant blue BBG	lb.	2.07	—
729 Blue B, conc	lb.	3.06	—
749 Red BX	lb.	.87	—
800 Chinoline yellow ZSS	lb.	2.67	—
860 Indufine base ZM	lb.	1.07	—
880 Induline base Z2R	lb.	1.07	—
814 Yellow NN, conc	lb.	3.11	—
841 Safranine GF, extra, conc.	lb.	3.48	—
865 Nigrosine J	lb.	4.76	—
922 Blue GXX	lb.	1.88	—
978 Black GXCF, conc	lb.	.32	—
1034 Alizarine red SC	lb.	2.85	—
1054 Alizarine blue SAPX	lb.	3.20	—
1078 Alizarine green CG, extra.	lb.	2.99	—
1085 Alizarine blue black B	lb.	2.56	—
1096 Golden orange GFD, single paste	lb.	2.19	—
1099 Dark blue BO, single paste.	lb.	1.93	—
1101 Jade green N supra double paste	lb.	1.10	—
1106 Blue RS, double paste	lb.	3.26	—
1113 Blue BLPD, double paste	lb.	2.48	—
1150 Olive R, single paste	lb.	1.21	—
1151 Brown R, single paste	lb.	1.94	—
1171 Indigo synthetic, 20% paste.	lb.	.31	—
1217 Orange RD, double powder.	lb.	3.94	—
p-4 Brown PG	lb.	2.54	—
p-14 Brown EB	lb.	1.83	—
p-24 Gray L	lb.	1.76	—
p-80 Diazo brilliant scarlet ROAD	lb.	3.07	—
p-202 Diazo black VJ, conc	lb.	2.10	—
p-244 Brilliant scarlet BN	lb.	1.44	—
p-313 Naphthol SWF	lb.	2.24	—

Dyes, coaltar oil soluble, 100 lb. dms., dlvd.

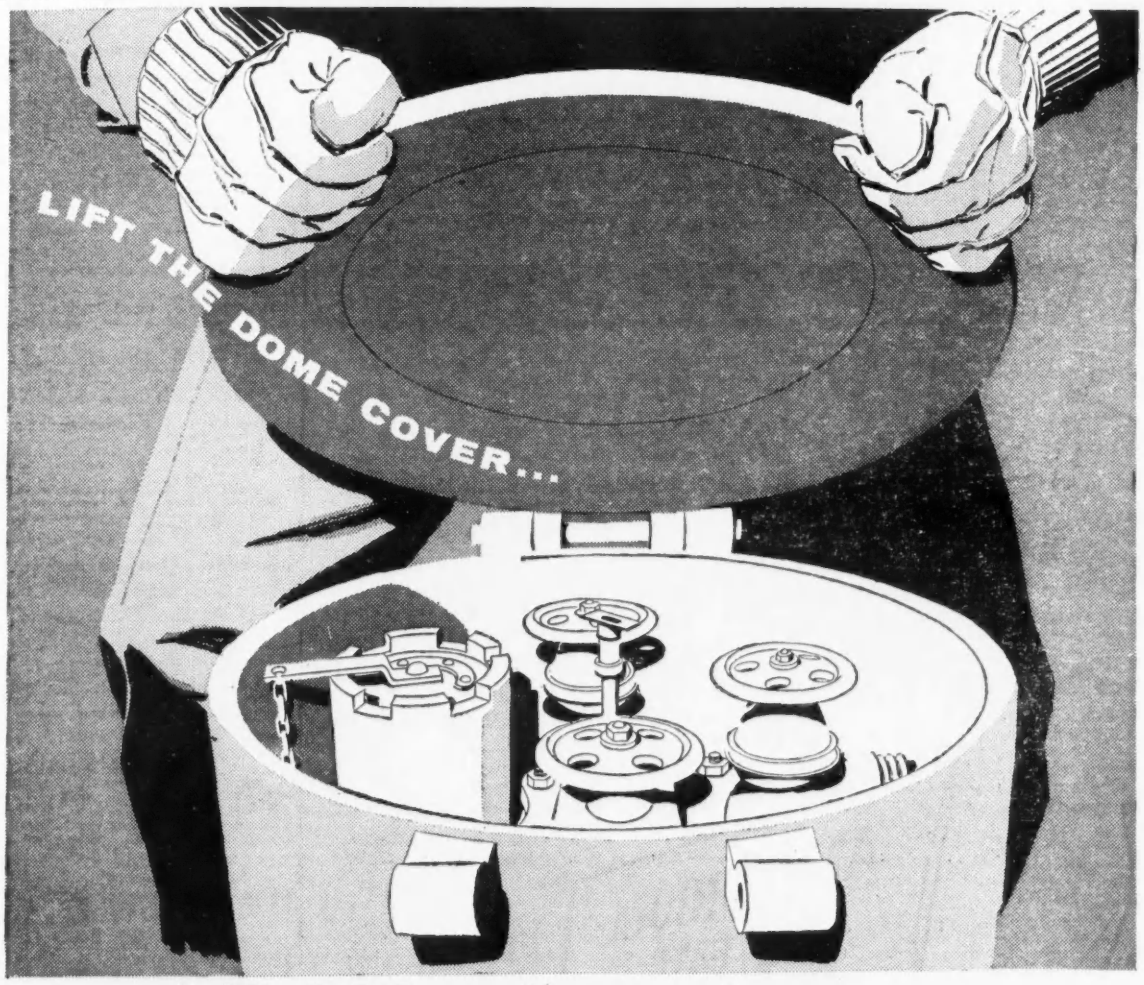
24 Oil orange Z-7078	lb.	1.06	—
73 Oil scarlet ZBL	lb.	1.44	—
1073 Oil violet ZIRS	lb.	6.81	—
1078 Alizarine cyanine green base Z	lb.	6.13	—
1080 Oil violet special Z	lb.	6.81	—
Oil black ZBC	lb.	4.46	—
Oil black ZBD	lb.	3.03	—
Oil black ZHH	lb.	4.61	—
Oil black ZMM	lb.	6.52	—
Oil blue ZN	lb.	8.02	—
Oil blue ZV	lb.	4.95	—
Oil orange ZMG	lb.	1.32	—
Oil red Z-1700	lb.	1.49	—
Oil yellow ZG, conc	lb.	6.33	—

Dyes, coaltar, spirit soluble, 100 lb. dms., dlvd

p-517 Spirit yellow ZR	lb.	4.62	—
p-520 Spirit orange ZR, conc	lb.	5.87	—
Spirit black ZRB	lb.	2.95	—
Spirit brown ZG	lb.	5.30	—
Spirit red ZB, conc	lb.	6.41	—

E

Echinacea root, bls	lb.	1.10	—
Egg albumin (see Albumin).			
Yolk, dried, dom., bbls	lb.	1.03	1.05
tanners, bbls	lb.	.06	.06½
Elm bark, grinding, bls	lb.	.30	.32
powd., bbls., bxs	lb	45	—
select, bundles	lb	75	—
Emetine hydrochloride, USP bots	oz.	48.25	49.00
Endrin tech dms dlvd., 100% basis	lb	3.75	—
Ephedrine syn., USP, anhyd., bots., 100-oz. lots	oz.	.98	1.00
hydrous bots., 100-oz. lots	oz.	.92	—
Hydrochloride, tins, 100-oz. lots	oz.	.75	—
Sulfate, cryst., tins, 100-oz. lots	oz.	.72	—
oz. lots	oz.	.72	—
powd., tins 100-oz. lots	oz.	.73	—
Epichlorohydrin, dms., c.l. dlvd	lb.	.35	—
l.c.l., dlvd	lb.	.36	—
tanks, dlvd	lb.	.33	—
Epinephrine syn. USP bots. 100-gram lots	gram	.60	—
Epsom salt (see Magnesium sulfate)			
Ergot, NF dms., tin-lined	lb	2.00	—
Eserine salicylate, bots	oz.	72.50	84.00
Sulfate, bots	oz.	87.75	—
Ether (see specific product)			
Ethyl acetate, nat., ferment., 85-88%, dms., c.l., frt. alld	lb.	.14½	—
l.c.l., frt. alld	lb.	.15½	—
tanks, frt. alld	lb.	.12	—
95-98% dms. c.l., frt. alld.	lb.	.14¾	—
l.c.l., frt. alld	lb.	.15¾	—
tanks, frt. alld	lb.	.12¼	—
99%, dms., c.l., frt. alld	lb.	.15	—
l.c.l., frt. alld	lb.	.16	—
tanks, frt. alld	lb.	.12½	—
syn. 85-88% dms., c.l., dlvd.	lb.	.14½	—
l.c.l., dlvd	lb.	.15½	—
tanks, dlvd	lb.	.12	—
95-98%, dms., c.l., dlvd	lb.	.14¾	—
l.c.l. dlvd	lb.	.15¾	—
tanks, dlvd	lb.	.12¼	—
99%, dms., c.l., dlvd	lb.	.15	—
l.c.l., dlvd	lb.	.16	—
tanks, dlvd	lb.	.12½	—
Acetoacetate, dms., c.l., dlvd	lb.	.58½	—
	lb.	.58½	—
l.c.l., dlvd	lb.	.59½	—
tanks, dlvd	lb.	.56	—
Acrylate, dms., c.l., t.l., dlvd.	lb.	.36	—
t.l. dlvd	lb.	.37	—
tanks dlvd	lb.	.34	—
Aminobenzoate, USP (see Benzocaine)			
Amyl keytone, dms., c.l., dlvd	lb.	.20	—
Amyl ketone, dms., c.l., dlvd	lb.	.20	—
l.c.l., same basis	lb.	.21	—
tanks, same basis	lb.	.17½	—
Benzoate, bots	lb.	.74	.90
Bromide, tech., 98% dms., c.l., frt. alld. E	lb.	.42	.44
l.c.l., frt. alld. E	lb.	.44	.46
Butyl ketone, dms., c.l., works.	lb.	.36	—
l.c.l., works	lb.	.36¾	—
tanks, works	lb.	.34	—
Butyrate, works	lb.	.85	.90
Carbamate (see Uretnane)			
Cellulose vis. 7 cps., bgs., 5,000-lb. lots or more, works	lb.	.70	—
smaller tots, works	lb.	.72	.80
vis. 10, 20, 50, 100, 150 cps bgs., 2,000-lb. lots or more, works	lb	.65	.70
smaller tots, works	lb	.67	.81
Chloride, tech., cyl., works		.20	.22
dms., works	lb	.18	.20
tanks, works	lb	.10	—
Cinnamate, cns	lb.	3.35	3.45



and 10,000 gallons of

JEFFERSON Ethylene Oxide

are ready to go!

Volume use of Ethylene Oxide calls for the economy of bulk shipment — and specially designed tank cars and well-engineered unloading systems insure safe and reliable delivery of this highly reactive chemical to your plant.

If you have any problem connected with current or anticipated bulk handling of Ethylene Oxide, Jefferson's engineers will be happy to share their specialized experience with you. Just call your nearest Jefferson office for assistance.

In addition to tank cars of 4- to 10-thousand gallons, drums of 400 pounds net are available from Jefferson stock points in any quantity including truckloads. For pilot plant use and laboratory experimentation, one- and five-gallon cylinders are available.

A new 44-page technical bulletin, *Ethylene Oxide*, is now available from Jefferson. In addition to extensive chemical information, it contains diagrams of containers and handling systems. Send for a copy.

Jefferson Chemical Company, Inc., Box 303, Houston 1, Texas.

Essential Chemicals from Hydrocarbon Sources

Jefferson
CHEMICAL COMPANY, INC.

HOUSTON • NEW YORK • CHICAGO • CHARLOTTE • LOS ANGELES

Ethyl ether, absolute, ACS, dms. lb. .27 - —
anesthesia, USP, hospitals, 1-lb. cns lb. 1.01 - —
½-lb. cns lb. 1.11 - —
¼-lb. cns lb. 1.21 - —
indust., dms., c.l., dlvd. lb. .12½- —
l.c.l., dlvd. E lb. .13½- —
tanks, dlvd. E. lb. .10 - —
Gallate, dms., 100 to 2,000-lb. lots lb. 3.90 - 4.40
Iodide, cbys., works lb. 3.30 - —
Methacrylate, dms., c.l., and less than truckload, works, frt. equald lb .51½ .52
Morphine hydrochloride, USP, bots. oz. 11.85 - —
Nitrite (see Nitrous ether).
Oenanthate, dms. lb 1.00 1.50
Oleate, dms. l.c.l., works lb No prices
Oxalate (see Diethyl oxalate)
Silicate dist (see Tetraethyl orthosilicate).
40% available SiO_2, dms., c.l., dlvd lb. .49½- —
l.c.l., dlvd lb. .50½- —
tanks, dlvd lb. .47 - —
Ethylethanolamines, mixed, dms., c.l., dlvd. E lb. .43½- —
l.c.l., dlvd. E lb. .44½- —
tanks, dlvd. E lb. 41½- —
N-Etnyl-a-naphthylamine, dms. works, lb. 1.02 - —
N-Ethyl-o-toluidide, bbls. lb. .88 - —
Ethylamine (see Mono-, Di- or Tri-)
N-Ethylaniline, dms. c.l. frt. alld. lb. .57 - —
l.c.l., frt. alld lb. .58 - —
tanks, frt. alld lb. .55 - —
Ethylbenzene, 99% dms., c.l., or t.l., frt. equald lb. .17 - —
l.c.l., same basis lb. .18 - —
tanks, same basis lb. .15 - —
Ethylene dichloride, dms. c.l., dlvd. lb. .11½- —
l.c.l., same basis lb. .12½- —
tanks, same basis lb. .09 - —
Ethylene dichloride prices W. of Rockies, 1c. per lb higher.
Glycol, indust., dms., c.l., dlvd. E lb. .16 - —
l.c.l., same basis lb. .17 - —
tanks, same basis lb. .13½- —
Monobutyl ether, dms., c.l., dlvd. E lb. .22 - —
l.c.l., dlvd. E lb. .23 - —
tanks, dlvd. E lb. .19¼- —
Monoethyl ether, dms., c.l., dlvd. E lb. .21 - —
l.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. .18½- —
Acetate, dms., l.c., dlvd., E lb. .19½- —
l.c.l., dlvd. E lb. .20½- —
tanks, dlvd. E lb. .17 - —
Monomethyl ether, dms., c.l., dlvd. E lb. .21 - —
l.c.l., dlvd. E lb. .22 - —
tanks, dlvd. E lb. .18½- —
Acetate, dms., l.c., dlvd., E lb. .29 - —
l.c.l., dlvd. E lb. .29¾- —
tanks, dlvd. E lb. .27 - —
Monostearate, triple pressed, dms. lb. .33 - .35
Oxide, dms., c.l., dlvd. E lb. .21½- —
l.c.l., dlvd. E lb. .24½- —
tanks, dlvd. E lb. .15½- —
Trichloride (see Trichloroethane).
Ethylenediamine, 85-88%, dms., c.l., dlvd. E, 100% basis lb. .46 - —
l.c.l., dlvd. E., 100% basis lb. .47 - —
tanks, dlvd. E., 100% basis lb. .44 - —
Ethylvanillin, cns., 25-lb. lots lb. 6.20 - 6.25
Eucalyptol, USP, cns., dms. lb. 1.25 1.50
Eugenol, USP, bots lb. 2.25 2.60
Euphorbia herb, bls lb. .15 - .17

F

Feldspar, 140-200 mesh, bulk, c.l., works ton 16.50 - —
Feldspar in bags $3 per ton higher
Fennel seed, Argentine, bgs. lb. .14 - —
Czech, medium, bgs. lb. .09 - —
Indian, light, bgs. lb. .15½- —
Roumanian, bgs. lb. .09 - —
Fenugreek seed, Indian, bgs. lb. .08½- .09
Moroccan, bgs lb. .08½- .09
Ferric acetate liquor, 28°, bbls., c.l., works lb. .09 - —
l.c.l., works lb. .09¾- —
soln., USP IX, cbys lb. .16 - —
djns. lb. 17 - —
Cacaodylate, NF, bots lb. 13.00 -14.00
Chloride, anhyd., tech., dms., c.l., works 100 lbs. 7.00 - —
l.c.l., works 100 lbs. 7.85 - —
indust., cryst., bbls., c.l., works. 100 lbs. 5.25 - 6.75
l.c.l., works 100 lbs. 5.75 - 7.25
42° Be., photo grade, cbys., c.l., works 100 lbs. 7.25 - 8.25
sewage grade, tanks, frt. equald 100% basis. 100 lbs. 3.50 - —
USP, cryst., dms., works lb .07½- .09
Citrate, gran., dms lb. .86 - —
Hypophosphite, NF, dms lb. 3.45 - —
Naphthenate, liq., 6% Fe, dms., frt. alld lb. .25¾- —
Oxalate, gran., dms lb. .85 - .87
Oxides (see oxides under Black, Brown, Red, and Yellow.)
Phosphate, NF, soluble, gran., pearls cs lb. .64 - .65
Pyrophosphate, NF VII, soluble, powd., gran., pearls, dms., 10,000 lb. lots lb. .40½- —
Resinate, 6¾% Fe, dms., frt. alld. lb. .29½- —
Stearate, dms. c.l., frt. alld lb. .37 - —
l.c.l., frt. alld lb. .38 - .43
Sulfate, partially hydrated, bgs., c.l., works ton 31.75 -33.75
l.c.l., works ton 34.75 -40.75
lb. .27 - —
Ferric-ammonium, citrate, brown, pearls, NF, gran., dms lb. .60 - .63
green, pearls, USP XII, gran., dms lb. .60 - .63
Oxalate, fine gran., dms lb. .25½- .28½
Ferric-potassium oxalate, fine gran., dms lb. .30½- .33½
Ferric-sodium oxalate, fine gran., dms lb. .25½- .28½
Ferrous gluconate, NF, dms lb. .94 - —
Sulfate, gran., bgs., c.l., works. ton 34.50 - —
l.c.l., dlvd. Metropolitan area 100 lbs. 3.35 - 4.25
bbls., c.l., works ton 40.00 - —
bulk, c.l., works ton 27.00 - —
USP, cryst., bbls., dms. lb. .09½- .10
Fir balsam, Canada, cns gal. 32.00 - —
Oregon, bbls gal. 4.50 - —
Fishliver oil (see Oil, fishliver).
Fishmeal, dom., menhaden, 60% protein grd., bgs., Chesapeake Bay area ton 140.00 - —
scrap, same basis ton 136.00 - —
Fleaseed (see Psyllium seed)
Formaldehyde, USP, 37% (inhibited), methanol, Zone 1, dms., c.l., dlvd lb. .07 - —
l.c.l., works lb. .0745- .075
tanks, dlvd lb. .042 - —
Zone 2, 12-15% methanol, dms., c.l., dlvd lb. .0735- —
tanks, dlvd lb. .045 - —
methanol-free (uninhibited), Zone 1, tanks, dlvd lb. .0395- —
Zone 2, tanks, dlvd lb. .042 - —

Fringetree bark, bls lb. .60 - .61
Fullers' earth, bgs., c.l., Ill. mines, ton 19.00 - —
powd., insecticide grade, dried, bgs., c.l., Ga. or Fla. mines, ton 17.50 - —
calcined, bgs., c.l., same basis ton 20.00 -21.75
oil-bleaching grade, 100-mesh, bgs., c.l., same basis ton 16.30 -17.00
200-mesh, bgs., c.l., same basis ton 17.50 -18.00
spent, bgs., c.l. shipt point ton. 4.50 5.00
Furfural, dms., c.l., works lb. .13 - —
l.c.l., works lb. .14 - —
tanks, dlvd. E lb. .12 - —
dlvd. W lb. .13 - —
Fusel oil, refd., dms., c.l. dlvd lb. .18 - —
l.c.l., dlvd lb. .19 - —
tanks, dlvd lb. .15½- —
Fustic extract, cryst. No. 1, bbls., l.c.l lb. .47½- —
No. 2, bbls., l.c.l lb. .45½- —
No. 3, bbls., l.c.l lb. .43½- —
liq., No. 1, bbls., l.c.l. lb. .22½- —
No. 2, bbls., l.c.l lb. .21½- —
No. 3, bbls., l.c.l lb. .19 - —
solid, No. 1, bxs., l.c.l. lb. .45 - —

G

G salt, bbls., frt. alld. 100% basis lb. .73 - —
Gammapicoline (see g-Picoline)
Gelatin, edible, pure (pork skin), 75 Bloom test, bbls., c.l lb. .53 - —
150 Bloom test, bbl., c.l lb. .64 - —
200 Bloom test, bbls., c.l lb. .70 - —
225 Bloom test, bbls., c.l lb. .73 - —
275 Bloom test, bbl., c.l lb. .81 - —

Gelsemium root, bls lb. .26 - —
Gentian root, bls. lb. .23 - —
grd., bbls., bxs lb. .27 - —
powd., bbls., bxs lb. .27 - —
Geraniol, extra, cns., dms. lb. 3.95 - —
standard, cns., dms. lb. 3.75 - —
Geranyl acetate, cns. lb. 3.95 - —
Ginger oleoresin, NF, from African root, bots lb 4.00 7.75
from Jamaican root, bots lb 6.00 -10.25
Root, African, bls. lb. .33 - —
Cochin, bgs. lb. .29 - —
Jamaican, No. 2, bgs lb. .78 - —
No. 3 bgs. lb. .75 - —
Nigerian, split, bgs. lb. .28 - —
Glauber's salt, anhyd. (see Sodium sulfate)
Glue, bone, extracted, dry bone, 86 jellygrams, bgs., c.l., dlvd lb. .15 - —
104 jellygrams, same basis lb. .17 - —
131 jellygrams, same basis lb. .18 - —
164 jellygrams, same basis lb. .20½- —
191 jellygrams, same basis lb. .21 - —
222 jellygrams, same basis lb. .22 - —
12 green 40 jellygrams, bgs., c.l. dlvd lb. .13½- —
65 jellygrams, same basis lb. .13¾- —
88 jellygrams, same basis lb. .14 - —
115 jellygrams, same basis lb. .14½- —
135 jellygrams, same basis lb. .15 - —
164 jellygrams, same basis lb. .16 - —
180 jellygrams, same basis lb. .17 - —
200 jellygrams, same basis lb. .18½- —
Bone glue, l.c.l. prices 1c. higher.

Glue, hide, 70-94 jellygrams, bgs., c.l., dlvd lb. .15 - —
95-121 bgs., c.l. dlvd lb. 16 - —
122-149, bgs., c.l., dlvd lb. .18½- —
150-177, bgs., c.l., dlvd lb. .21 - —
178-206, bgs., c.l., dlvd lb. .23½- —
207-236, bgs., c.l., dlvd lb. .26 - —
237-266, bgs., c.l., dlvd lb. .28 - —
267-298, bgs., c.l., dlvd lb. .30 - —
299-330, bgs., c.l., dlvd lb. .32 - —
331-362 bgs., c.l., dlvd lb. .34 - —
363-394, bgs., c.l., dlvd lb. .36 - —
395-427, bgs., c.l., dlvd lb. .38 - —
428-460, bgs., c.l., dlvd lb. .40 - —
461-494, bgs., c.l., dlvd lb. .42 - —
495-529, bgs., c.l., dlvd lb. .43 - —
Hide glue l.c.l. prices 1c higher
l-Glutamine, bots gram. .65 - —
Glycerine, nat., crude, saponification, 88%, to refineries, tanks lb. .16½- —
soaplye, 80%, tanks lb. .15 - —
refd., CP, USP 99% dms., c.l., dlvd lb. .29¾- —
l.c.l., dlvd lb. .29⅞- —
tanks, dlvd lb. .27⅞- —
96%, dms., c.l., dlvd lb. .28½ —
l.c.l., dlvd lb. .29 - —
tanks, dlvd lb. .27 - —
high gravity, dms. c.l., dlvd. lb. .29¼ —
l.c.l., dlvd lb. .29¾- —
tanks, dlvd lb. .27¼- —
nat., refd., high gravity lb. .28½- —
l.c.l., dlvd. lb. .29 - —
syn., dms., c.l., dlvd lb. .29½ —
l.c.l., dlvd. lb. .30 - —
tanks, dlvd lb. .28 - —

A new type of weather-resistant alkyd resin—made from isophthalic acid and *Glycerine*—is now being offered in experimental quantities.

The stability and compatibility of Glycerine as a polyol in surface-coating alkyds and its low MW/Hydroxyl ratio, have for years made a wide range of resin properties feasible.

Now Glycerine is combined with isophthalic, a dibasic acid which only recently became available in commercial quantities and which imparts higher viscosity with lower acid number. It also permits higher fatty acid content at workable consistencies. The result: excellent outdoor durability, mildew-resistance and gloss-retention—all demonstrated in a five-year exposure test completed recently. Among 100 alkyd-based enamels tested, an isophthalic-soybean-Glycerine alkyd enamel stood up best.

Here again, *nothing takes the place of Glycerine.*

This balanced group of properties keeps Glycerine's usefulness growing

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HUMECTANT • CARRIER • SOLVENT • LUBRICANT • SOFTENER • EMOLLIENT • ANTI-FREEZE • ALKYD BASE •

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☐ 20-page booklet "Glycerine Alkyds Tailored to Need"

☐ 8-page booklet on "Federal Specifications for Glycerine"

☐ 16-page booklet on Glycerine properties and applications

For your free copy of any or all of these booklets write: GLYCERINE PRODUCERS' ASSOCIATION • 295 Madison Ave., New York 17, N.Y.

Glycine (see Acid aminoacetic).
Glycerol (see Glycerine).
Glyoxal, 30% dms, c.l., works lb. .18½ - —
l.c.l., works lb. .19¼ - —
Golden seal root, NF tested, bls. lb. 3.50 - —
Graphite amorph., powd., bgs., fib. dms., ex whse lb. .06 .09½
crystalline 88-90% powd., bgs., fib dms. ex whse lb. .19 - .21½
90-92%, powd., bgs., fib. dms., ex whse lb. .21 - .24½
95-97%, powd., bgs., fib. dms., ex whse lb. .29 - .31½
Flake, No. 1, 90-95%, bgs., fib. dms., ex whse lb. .29 - .31
No. 2 90-95% bgs., fib. dms., ex whse lb. .29 - .31
Grease, white, choice, all hog tanks, dlvd lb. .08¾ - .08½
yellow, tanks, dlvd lb. .07 - .07⅛
Green, brilliant, thioflavin, toner, molybdated, PMA, kgs., works lb 5.10 - —
tungstated, PTMA kgs., works, lb. 6.40 - —
Chrome, CP, dark, light, medium, blue content 1 to 15%, bbls., N. of Tenn. and N. C., E. of Miss., including St. Paul, Minn., Davenport, Rock Island, St. Louis lb. .40 - —
16-30%, bbls. same basis lb. .40 - —
31-45%, bbls. same basis lb. .41 - —
45-49%, bbls., same basis lb. .44 - —
Green, chrome, CP, reduced color, 25%, bbls., same basis lb. .19 - —

Chrome green prices are ½c. higher, dlvd. at the following points, except as noted:—Ala., Fla., Ga., La. (Shreveport 1½c.), Miss. N. C., S. C., Tenn., Texas (Dallas, Ft. Worth, 1¼c.; El Paso, 2c.); Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1c. higher dlvd. Pac. coast; for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.

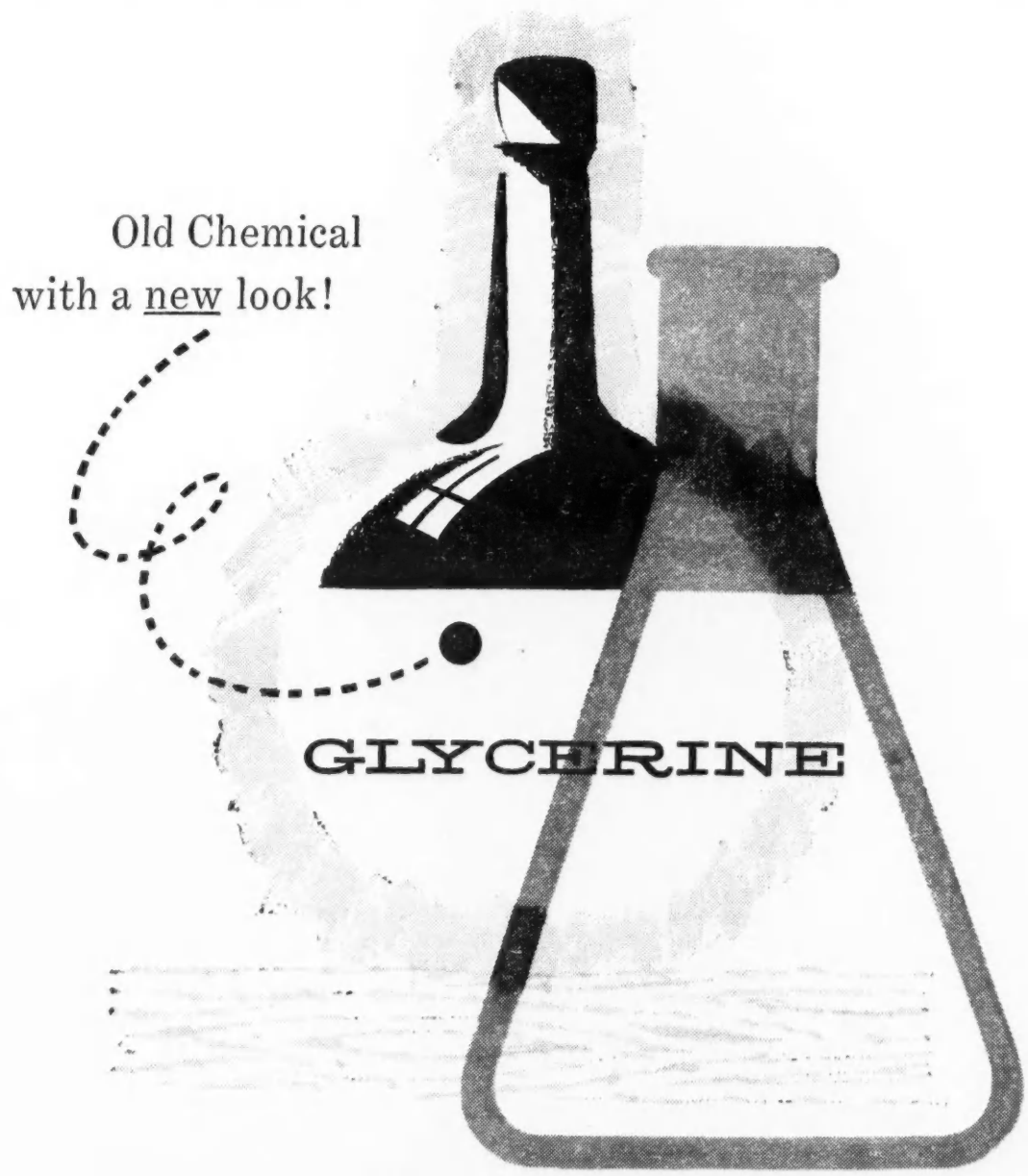
Chromium oxide, hydrated, bbls., fib. dms., c.l., frt. alld. lb. 1.00 - 1.20
pure, bgs., c.l., frt. alld lb. .44¾ - —
l.c.l., same basis lb. .45½ - —
Dyes (see Dyes, coaltar).
Malachite, straight, PTMA, bbls., works lb. 4.60 - —
Paris (see Paris green).
Phthalocyanine toner, bbls., works. lb. 3.95 - —
resinated, bbls lb. 3.50 - —
water dispersable, bbls lb. 1.71 - —
Pigment B kegs lb. 1.35 - —
paste, kegs lb. .38 - —
Grindelia robusta nero bls lb. .38 .40
Guaiacol, NF, cryst, dms., tins lb 2.10 - 2.15
liq., cbys., dms lb. 2.30 - 2.40
Carbonate, NF VII, dms lb 3.40 - 3.45
Gum, aloe (see Aloe).
Arabic, amber sorts, bgs lb. .23 - —
powd., USP, bbls lb. .28 - —
Gum, asafetida (see A).
Asphaltum (see A).
Benzoin, Sumatra, cs lb. .33 - —
Camphor (see C).
Cellulose, high vis., bgs., 23,000-lb. lots or more, works, frt. alld lb. .55 - —
smaller lots, same basis lb. .57 - —
Copal, Congo, No. 1, bgs. lb. .22½ - .25
No. 2, bgs. lb. .18½ - .20
No. 3, bgs. lb. .15¼ - .17
Manila, C, bgs lb. .36½ - .40
CBB, bgs. lb. No stocks.
DBB, bgs lb. .26¾ - .29
DK, bgs lb. No stocks.
dust, bgs lb. .14 Nom.
MA, soft, bgs lb. .18½ - .21
WS bgs. lb. No stocks.
Philippine, pale, chips, bgs lb. .21½ - .24
nubs, bgs lb. .31¾ - .34
seeds, bgs lb. .20 - .22
sorts, bgs lb. .19¾ - .22
Pontianak, chips, bgs. lb. .26 - —
nubs, bgs lb. .37¾ - .40
Dammar, Batavia, A E, cs lb. No stocks.
dust, bgs lb. .16 - .18
E, bgs lb. .20 - .22
East India, batu, bold, bgs lb. .13½ - .15
nubs and chips, bgs lb. .08 - .09
black, bold, bgs lb. .14 - .16
unscraped, bgs. lb. .11¾ - .13
nubs and chips, bgs lb. .11 - .13
pale, chips, bgs. lb. .12¾ - .14
nubs, bgs lb. .17 - .19
Siam, cs. lb. .36½ - .39
Singapore, No. 1, bgs lb. .44¼ - .46
No. 2, bgs. lb. .31¾ - .33
No. 3, bgs lb. No stocks.
dust, bgs. lb. .16¾ - .18
seeds, bgs lb .20 .22
Gum, ester, gum-rosin type, dms., c.l., dlvd., Ill., Md., Ky., Mich., Mid-Atl. States, N. E. States, Minneapolis, N. C., Ohio, St. Louis, St. Paul, Va., W Va lb. .14½ - .16
wood-rosin type, dms., c.l., same basis lb. .15 .16
Guar, food grade, bgs. lb. .50 - —
tech. grade, bgs. lb. .40 - —
Karaya, No 1, NF, powd., bbls lb. .45 - —
No 2, powd., bbls. lb. .45 - —
No 3, powd., bbls lb. .40 - —
Locust bean, powd., bgs lb. .45 - —
Myrrh, cs lb. .55 - —
Opium (see Opium).
Olibanum siftings, cs. lb. .15 - .20
tears, cs lb. .22 - .30
Rosin (see Naval Stores, Protective Coatings Market).
Sterculia (see Gum Karaya).
Tragacanth No. 1, ribbons, cs. lb 3.90 - —
No. 2, cs lb. 3.20 - —
No. 3, cs. lb. 2.65 - —
powd., USP, bbls lb. 1.15 - —
Gypsum, plaster of paris, 100-lb. paper, bgs, trucks, dlvd N Y C ton 20.30 - —
Terra alba, dom. paper bgs., same basis ton 20.00 - —
works, N. Y. C ton 17.00 - —
imp., English, 100-lb. paper bgs., ex dock, N. Y. C ton 55.00 - —
ex warehouse ton 60.00 - 62.00

H

Hawthorn berries, bgs lb. 21 - —
Heliotropin, 100-lb. lots, dms lb 3.00 3.25
Hellebore root, dom., green bls lb 70 75
Helonias root, bls lb 1.75 2.00
Hematine extract, cryst., No 1, bbls., l.c.l lb. .47 - —
No. 2, bbls., l.c.l lb. .43 - —
No. 3, bbls., l.c.l lb. .41 - —
No 4 bbls., l.c.l lb. .39 - —
No 5, bbls., l.c.l lb. .37 - —
paste, No 1, bbls., l.c.l lb. .29½ - —
Henbane leaves, bls lb. .35 .40
Heptane, indust, tanks, Bayonne, N J gal. .19 - —
Baytown, Tex gal. .14¾ - —
Borger, Tex gal. 14¾ - —
Hesperidin, purif., 25 lb. lots, f.o.b., works lb 8.95 - —
Methylchalcone, bots., 50-lb. lots, works lb. 22.50 - —
5-lb. lots, works lb. 23.00 - —
1-lb. lots, works lb. 23.50 - —
Hexachlorophene, dms lb 1.98 - —
Hexalin (see Cyclohexanol).
Hexamethylenetetramine, tech., bgs., 20,000-lb. lots or more, Perth Amboy or N Y C lb. .222 - —
1,000-19,999-lb lots, same basis lb. .232 - —
smaller lots, same basis lb. .242 - —
fib dms., 1,000-lb. lots or more, same basis lb. .239 - —
smaller lots same basis lb. .242 - —
USP, dms., 500-lb. lots or more, smaller lots, same basis lb. .41½ - —
Hexane, indust, tanks, Bayonne, N. J gal. .19 - —
Baytown, Tex gal. .15½ - —
Borger, Tex gal. .15½ - —
1-Hexanol, dms., c.l., works lb. .35 - —
l.c.l., works lb. .35¾ - —
tanks, works lb .33 - —
Hexyl cinnamic aldehyde, dms lb 4.00 - 7.50
Salicylate, dms lb 1.75 - —
Hexylene glycol, dms., c.l., dlvd lb. .17 - —
l.c.l., dlvd lb. .18 - —
tanks, dlvd lb. .14½ - —
n-Hexyl methacrylate, dms., less than truckload works lb. .71 - —
Hexylresorcinol, USP dms., 50 lb. lots or more, dlvd lb 14.00 - —
smaller lots, dlvd lb 14.50 - —
Homatropine hydrobromide, USP bots oz. 5.50 - —
Methylbromide, USP, bots oz. 3.90 - —
Hoofmeal 17-18% ammonia, bulk, c.l., Chicago unit-ton 6.25 - —
Horehound herb, bls lb 16 - 19
Hydrastine, bots. oz. 28.75 - 29.50
Hydrochloride, NF, bots oz. 28.75 - 29.50
Hydrastis (see Goldenseal).
Hydrazine free base, ret dms., works lb No stocks.
Hydrate, 85%, ret. dms., works lb. 1.35 1.55
100%, ret. dms., works lb. 1.60 1.90
Hydrocortisone acetate, bulk, bots., dms gram 4.50 - —
Alcohol, bulk, bots., dms gram 4.50 - —
Hydrofuramide, dms., fib cns., works lb. .30 - .40
Hydrogen chloride, anhyd., 50-lb. cyls., c.l., works lb. .45 - —
l.c.l., works lb. .55 - .60
Fluoride anhyd., cyls., dlvd. E lb. .30½ - .32¼
dlvd. W lb. .39 - —
tanks, works lb. .21 - —
Peroxide, USP, bbls., dlvd lb. .03¾ - .05
35%, dms., c.l., dlvd lb. .202 - —
l.c.l., dlvd lb. .211 - —
tanks, dlvd lb. .1800 - —
Hydroquinone, photo grade, bbls., dms lb. .98 1.02
tech, dms, c.l., dlvd lb. .82½ - —
l.c.l., dlvd lb. .84½ - —
Hydroxycitronellal, cns lb. 6.00 7.45
Hyoscine salts (see Scopolamine)
Hydrobromide, bots oz. 6.00 - 7.00
Sulfate, bots oz. 6.75 - 7.25
Hypernic extract, cryst., No 2, bbls., l.c.l lb. .52 - —
liq. No. 1, bbls., l.c.l lb. .35 - —
No 2, bbls., l.c.l lb. .27 - —

I

Ichthammol, NF, jars lb. .75 - 2.57
Indian red (see Red, Indian)
Indigo (see Dyes, coaltar, 1171 Indigo synthetic).
Indole, CP, bots lb 16.50 - 21.00
Inositol, bots., dlvd lb 5.00 - —
dms., dlvd lb 4.50 - 4.75
Insect flowers (see Pyrethrum).
Iodine, crude, kgs lb. 1.10 - —
resub., USP, dms., jars lb 2.30 2.32
Iodochlorohydroxyquinolin, USP, dms lb 5.90 —
Iodoform, NF, dms., kgs lb 4.90 5.00
a-Ionone, cns lb 5.25 5.40
b-Ionone, cns lb 5.40 5.70
Ipecac root, bgs., whole lb. 7.50 - —
powd., bbls., bxs lb. 7.85 - —
Irish moss, bleached, prime, bls lb 28 - .34
Iron compounds (see Ferric or Ferrous).
Oxides (see under Black, Brown, Red, and Yellow).
Isoborneol, cns lb 1.25 1.70
Isobornyl acetate, cns lb. .46 - 70
Formate, dms lb .80 - —
Propionate, dms lb 1.15 - 1.45
Isobutyl acetate, perfume grade, cns lb. 75 1.00
solvent grade, dms., c.l., dlvd E. of Rockies lb. .14¾ - —
l.c.l., same basis lb. .15¾ - —
tanks, same basis lb. .12¼ - —



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Isobutyraldehyde, CP, dms., c.l., dlvd.	lb.	.27½	—
t.c.l., dlvd.	lb.	.28½	—
tech., dms., c.l., dlvd.	lb.	.21½	—
t.c.l., dlvd.	lb.	.22½	—
tanks dlvd.	lb.	.19½	—
Isoeugenol, cns.	lb.	3.60	4.40
Isoniazid, powd., bulk, 25-kilo lots or more	kilo.	23.00	-25.50
smaller lots.	kilo.	24.00	-26.00
Isopentane, coml. grade, tanks, f.o.b. Tex, refy	gal.	.15½	—
Isonicotinic acid hydrazide (see Isoniazid).			
Isophorone, dms., c.l., works.	lb.	.24½	—
t.c.l., works.	lb.	.25½	—
tanks, works	lb.	.22½	—
Isopropanol (see Alcohol, isopropyl).			
Isopropyl acetate, dms., c.l., dlvd.	lb.	.13½	—
t.c.l., same basis.	lb.	.14½	—
tanks, same basis.	lb.	.11	—
Alcohol (see Alcohol, isopropyl).			
Benzene (see Cumene).			
Ether dms., c.l., dlvd.	lb.	.07	—
t.c.l. dlvd.	lb.	.08	—
tanks, dlvd	lb.	.03	—
Isopropyl-N-(3-chlorophenyl) carbamate, (CIPC), 70% in xylol, dms., c.l., t.l., works	lb.	.70	—
t.c.l., works	lb.	.714	.814
Isopropylamine (see Mono, Di, or Tri-).			
Isopropyl-N-phenyl carbamate, 450-lb fib dms, c.l., t.l., works.	lb.	.73	—
t.c.l. works	lb.	.80	.90
Isoquinoline dms., works.	lb.	.65	1.25

J

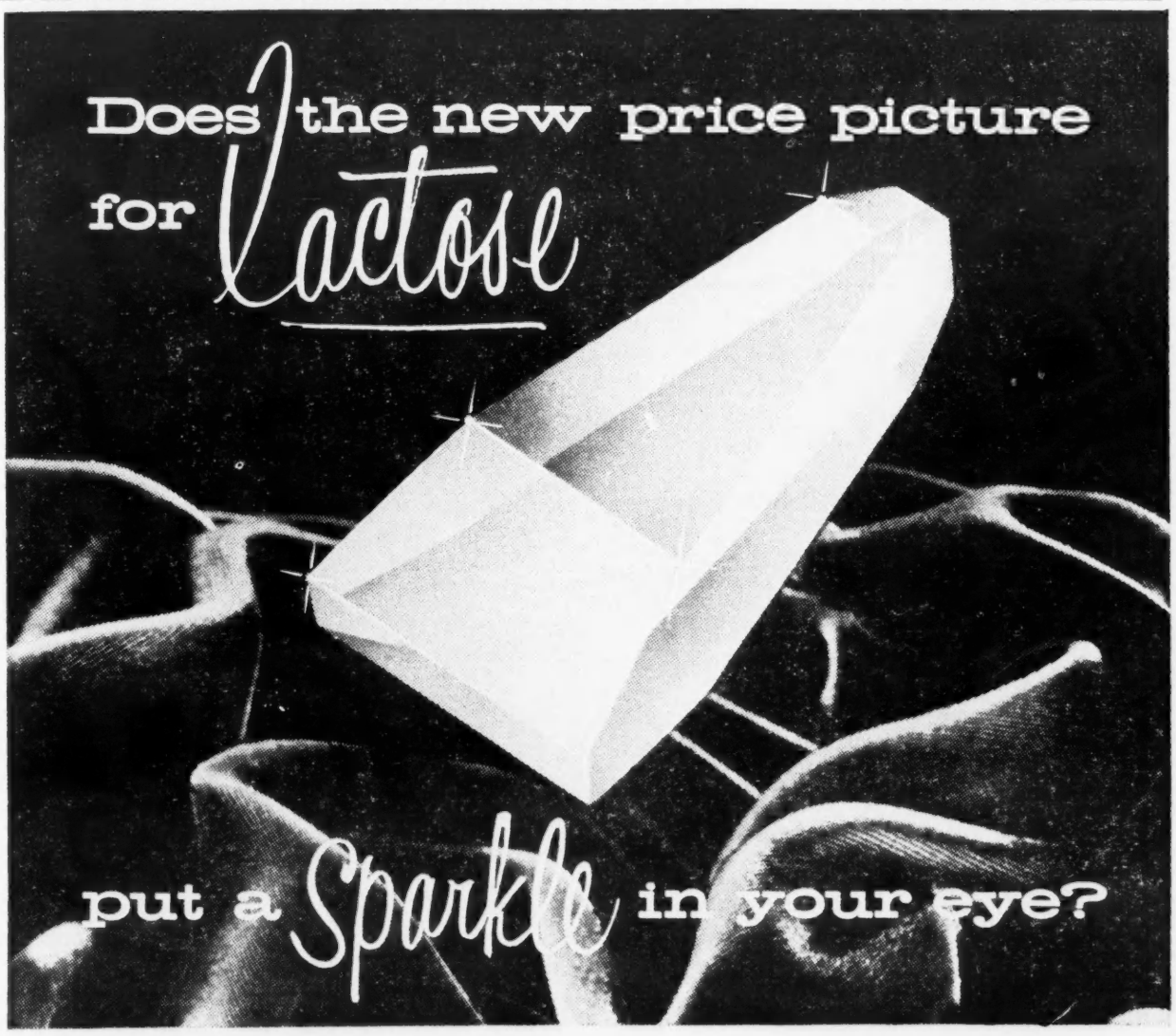
Jalap root, NF, bls.	lb.	NP	—
powd., bbls., bxs.	lb.	NP	—
Juniper berries, bgs.	lb.	.16	.20
Tar NF dms.	lb.	.42	.60

K

Kaolin (see also Clay China).			
NF, powd, fib dms.	lb.	.10	.12
colloidal fib. dms.	lb.	.15½	.17½
Kola nuts bgs	lb.	.15	—

L

Lactose, edible fib dms., 30,000-lb. lots, works	lb.	.15	.15½
2,000-lb lots, works	lb.	.15¾	.16½
200-1,800-lb. lots, works	lb.	.16¾	.17
Edible lactose in bgs. ½-1c. lower			
Fermentation grade, bgs., c.l., works	lb.	.08½	—
USP fib dms., 30,000-lb. lots, works	lb.	.21½	—
2,000-lb lots, works	lb.	.22¼	—
200-1,800-lb. lots, works	lb.	.22¾	—
USP lactose in bgs 1c lower.			
Lanolin, cosmetic, dms., works	lb.	.27	.29
USP, anhyd., dms., works	lb.	.25	.27
hydrous, dms., works	lb.	.24	.26
Lard, cash, dms., Chicago	lb.	.1340	—
Larkspur seed, bgs	lb.	.25	—
n-Lauryl methacrylate, dms., c.l. or t.l. works	lb.	.65½	—
Lavender flowers, medium, bls	lb.	.75	.80
grd., bls	lb.	.25	.40
select, bls	lb.	.90	—
Lead acetate, white, cryst., bbls.	lb.	.23½	—
gran., bbls	lb.	.24½	—
powd bbls	lb.	.24½	—
NF, cryst., gran. powd	lb.	.32½	—
Arsenate, acid, powder, dealers, 3-lb bgs or larger, c.l., frt alld on 96 lbs or more	lb.	.27½	—
t.c.l., frt alld	lb.	.28½	—
1-lb bgs., c.l.	lb.	.41½	—
t.c.l.	lb.	.42½	—
Blue, basic sulfate, bbls., c.l., shipt. point, frt alld	lb.	.17¼	—
t.c.l., same basis	lb.	.18¼	—
Carbonate (see Lead, white, basic carbonate).			
Chloride, dms	lb.	.43	—
Iodide NF V jars	lb.	3.82	—
Linoleate fused 26% Pb, dms.	lb.	.33	—
Metal pigs, prime, N. Y.	lb.	.16	—
St Louis	lb.	.1580	—
Metallic paste, dms., 20,000-40,000-lb. lots, works.	lb.	.33¾	—
10,000-20,000-lb lots, same basis	lb.	.34¾	—
200-2,000-lb. lots, same basis.	lb.	.35¾	—
Prices ex whse. Jersey City, N. J., 4½c per lb higher			
Monosilicate, bgs., c.l., works, frt. equald	lb.	.20	—
t.c.l. same basis	lb.	.2075	—
Naphthenate, liq., 16% Pb, dms., dlvd	lb.	.17	—
24% Pb, dms., dlvd	lb.	.21	—
solid, 37% Pb., dms., dlvd	lb.	.27½	—
Nitrate, bbls	lb.	.29¾	—
Orthosilicate-silica gel, 50-60% PbO dms. works	lb.	.29¾	.34¼
Peroxide, tech., powd. bbls	lb.	.38¾	.40¼
Phthalate, dibasic, dms., works.	lb.	.41	—
Red 95% Pb_3O_4, or less, bbls., c.l., works, frt. alld	lb.	.19	—
t.c.l., same basis	lb.	.20	—
97% Pb_3O_4, bbls, c.l., same basis.	lb.	.192	—
t.c.l., same basis	lb.	.202	—
98% Pb_3O_4, bbls., c.l., same basis.	lb.	.1935	—
t.c.l., same basis	lb.	.2035	—
Resinate, precip., 23% Pb, dms., dlvd	lb.	.32½	—
Salicylate normal, dms., works.	lb.	.46	—
Silicate (see Lead, white, basic, silicate)			
Sulfate (see Lead, blue, basic sulfate Lead white basic sulfate)			
Tallate, liq., 16% Pb, dms.	lb.	.15	—
24% Pb., dms	lb.	.18¼	—
solid, 30%	lb.	.23¼	—
White, basic carbonate, bgs., c.l., shipt. point, frt alld	lb.	.19	—
t.c.l., same basis	lb.	.20	—
silicate, bgs., c.l., shipt. point, frt. alld	lb.	.17¼	—
t.c.l., same basis	lb.	.18¼	—
sulfate bgs., c.l., shipt. point, frt. alld	lb.	.17¼	—
t.c.l., same basis	lb.	.18¼	—
Lecithin, edible, tech., bleached, non-ret. dms., c.l., works	lb.	.15	.17
t.c.l., same basis	lb.	.15½	.17½
unbleached, non-ret. dms., c.l., same basis	lb.	.13	.15
t.c.l., same basis	lb.	.14½	.16½
Lemon bioflavonoid complex, 25-lb. lots, works	lb.	9.00	—
dl-Leucine, dms., works	lb.	12.25	-15.00
Licorice root, whole, bbls.	lb.	.10	.12
gran., bbls	lb.	.15	.17
powd., bbls	lb.	.12	.13
Lignosulfonate, 70% tannin, bgs., c.l., works	lb.	.06½	—
t.c.l., works	lb.	.06¾	—
Lime, chemical (quicklime), bulk, c.l., metropolitan N. Y. destination, freight equalized with nearest producing point	ton.	20.46	—
Hydrated, bulk, c.l., same basis.	ton.	21.96	—
Spray, bgs., c.l., same basis	ton.	25.96	—
Lime salts (see Calcium).			
Lime-ammonium nitrogen 20.5% N (see Ammonium nitrate with dolomite)			
Limestone grd., bgs., works	ton.	3.50	4.00
Linalool, ex bois de rose oil, dms.	lb.	3.65	4.80
ex lignaloe wood oil, dms.	lb.	5.30	7.10
Linalyl acetate ex bois de rose, 90-92%, dms	lb.	3.30	5.10
96-98%, dms	lb.	4.05	6.75
ex petitgrain, bots	lb.	4.80	5.90
Lindane, 25% formulation, dealers, dms., frt. alld	lb.	1.58	1.68
99% tech., formulators, dms., frt. alld	lb.	2.65	3.25
Linden flowers with leaves, bls	lb.	.25	—
without leaves, bls	lb.	.30	—
Linseed meal expeller 32-34% bulk Midwest, mills	ton.	62.50	—
extracted 36% bulk same basis	ton.	54.00	-55.00
Litharge, coml., powd. bbls., c.l., works, frt. equald	lb.	18	—
t.c.l., same basis	lb.	.19	—
Lithium benzoate, dms	lb.	1.63	1.67
Bromide, NF, dms, works, frt equald	lb.	2.45	—
Carbonate, NF, dms., c.l., t.l., dlvd	lb.	1.29½	—
ton lots to t.l. dlvd	lb.	1.30	—
tech., dms., c.l., t.l., dlvd., frt. alld. works	lb.	.82	—
t.c.l., same basis	lb.	.83	1.11½



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• There's a new look for lactose — a new competitive price tag that's a challenging invitation for re-evaluating this versatile sugar. That's why many firms, seeking a better product, are re-analyzing processes . . . using lactose for present ingredients (other sugars, etc.) and developing new uses for it. If you represent one of these forward-looking firms . . . or are interested in the possibilities of lactose . . . consult Western Condensing, America's largest supplier of high-quality milk derivatives.

Rigid laboratory testing and quality control in manufacture make Western's milk sugar a product you can depend upon. With Western's lactose, you'll be assured of top-quality, high-purity materials that meet or exceed accepted standards. Available grades: U. S. P., edible or crude, in a variety of screen sizes on regular or special order.

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FOREMOST lactose

WESTERN CONDENSING COMPANY

Appleton, Wisconsin

A WORLD-WIDE SUPPLIER OF HIGH-QUALITY MILK DERIVATIVES.

DISTRIBUTED BY

McKESSON & ROBBINS, INC.

CHEMICAL DEPARTMENT

Lithium chloride, CP, anhyd., ton lots lb. 1.23½- —
tech., anhyd., dms., c.l., t.l., dlvd., or works, frt. alld. lb. 1.00 - 1.05
l.c.l., same basis lb. 1.05 - 1.05½
Citrate, NF, dms lb. 1.60 1.64
Fluoride, bbls., 10,000-lb. lots, dlvd lb. 2.17½- —
ton lots, dlvd lb 2.18½- —
less ton lots, dlvd lb 2.23½- —
Hydride powd., dms., 500-lots, works lb. 10.50 -12.50
Hydroxide, monohydrate, dms., c.l., t.l., dlvd or works, frt. alld lb. .80 - .80½
l.c.l., same basis lb. .81 - .81½
Manganite, dms., works lb .95 1.15
Nitrate, tech., dms. 100-lb. lots lb 1.25 - —
Salicylate, dms. lb. 1.60 - 1.70
Silicate, dms., works lb. 1.10 - 1.30
Stearate, dms., c.l. works lb. .47½- —
ton lots, works lb. .48½- —
less-ton lots, works lb. .53½- —
Sulfate, dms., 100-lb. lots lb. 1.15 - —
Titanate dms. works lb 1.25 1.35
Lithopone, ord., bgs., c.l., dlvd. E. lb. .08 - —
l.c.l., dlvd. E lb. .08¾ - —
Lobelia herb, bls lb. 1.50 —
Lobeline sulfate, bots. works oz. 37.50 -39.00

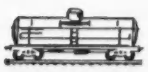
Logwood extract, cryst., No. 1, bbls., l.c.l lb. .41 - —
No. 2, bbls., l.c.l. lb. .39 - —
liq., No. 1, bbls., l.c.l. lb. .20 - —
No. 2, bbls., l.c.l lb. .19 - —
No. 3, bbls., l.c.l lb. .18½- —
solid No. 1, boxes, c.l. lb. .35 - —
Lycopodium, cs lb. 1.20 2.00
dl-Lysine hydrochloride, bots kilo. 140.00 -150.00

M

Mace, Siauw, siftings, bls lb. 2.50 - 2.80
West Indian, No. 1, bls., shipment lb. 3.00 - —
Magnesia, calcined, tech., bgs., ctns., works lb. .25¼- .26
syn., rubber grade, light, bgs., c.l. works lb. .29¼- —
extra light, bgs., c.l., works, lb. .29¼- .30
l.c.l., works lb. .30 - .35
USP, light, ctns lb. .35 - .36
heavy, bbls lb. .45 - .52
Magnesite, chemical grade, calcined, powd., bgs., c.l., works, frt equald ton. 82.50 - —
dead-burnt, standard grain, bulk, c.l., Chewelah, Wash ton. 40.00 - —
Magnesium bromide, jars lb. .90 1.00
Carbonate, tech., bgs., c.l., frt. equald lb. .10½- —
t.l., frt. equald lb. .11 - —
l.c.l., frt. equald lb. .12 - .13
Magnesium carbonate, USP, bgs., c.l., frt. equald lb. .12½- —
t.l., frt. equald lb. .13 - —
l.c.l., frt. equald lb. .14 - .15
Above prices are quoted f.o.b. works, freight equalized with metropolitan New York and competitive producing points.
Chloride, anhyd., 92% flake or pebble, dms., c.l., works lb. .12¾- —
l.c.l., works ton. 65.00 -80.00
Gluconate, dms., cns lb. 1.34 - 1.41
Hydroxide, NF, medicinal, bbls., dms., kgs lb. .26½- .30
Metal, 99.8% ingots, 10,000 lb. lots or more, works lb. .36 - —
pigs, 10,000-lb. lots or more, works lb. .35¼- —
sticks, cs., works, frt. alld. on carlots lb. .59 - —
Oxide (see Magnesia, calcined).
Nitrate, cryst., dms., works lb. .20 - —
Peroxide, 15%, dms., works lb. 1.00 - 1.05
Phosphate, tribasic, NF, bbls. lb. .75 - —
Silicate (see Talc).
Silicofluoride, dms., works lb. .10½- .12
Sulfate, tech., bgs., c.l., works, l.c.l., same basis lb. .14 - .15
hydrous, 99% flake, bgs., c.l., works ton. 55.00 - —
100 lbs. 2.15 - —
l.c.l., works 100 lbs. 2.90 - 3.15
USP, cryst., bgs., c.l., works, 100 lbs. 2.35 - —
l.c.l., 5,000 lbs., 1 withdrawal 100 lbs. 3.10 - —
smaller lots 100 lbs. 3.35 - —
Trisilicate, USP, dms., 5,000-lb. lots lb. .38 - —
1,000-lb. lots lb. .40 - —
100-lb. lots lb. .45 - —
Bulky and super grades of magnesium trisilicate 7c. per lb. higher

Malathion, dms., c.l., works lb. .90 - —
l.c.l., works lb. .92 - 1.02
Maleic anhydride, dms., c.l., dlvd. E lb. .27 - —
l.c.l., dlvd. E lb. .28 - —
tanks, dlvd. E lb. .26 - —
Prices on maleic anhydride W. of Rockies, 1½c. higher.
Mandrake root, bls lb. .55 - .60
Manganese acetate, bbls., dlvd lb. .35 - —
Arsenate, bgs lb. .16 - —
Borate, tech., fib. dms lb. .25 - —
Carbonate, bbls., works lb. .22 - —
Chloride, anhyd., dms., works lb. .25½- —
Dioxide, African, 84-87%, 40,000 to 99,999-lb. lots, burlap paper lined, bgs., gross for net, works ton. 102.00 - —
paper bgs., works ton. 98.50 - —
dms., works ton. 106.50 - —
Prices for manganese dioxide in 10,000 to 40,000-lb. lots $3 per ton higher.
Gluconate, dms lb. 1.80 - 1.94
Hydrate, bbls., dlvd lb. .36 - —
Hypophosphite, NF, dms lb. 3.52 - —
Linoleate, liq., 4.35% Mn, dms lb. .32½- —
solid, precip., 8.2% Mn, bbls lb. .37½- —
Naphthenate, liq., 6% Mn., dms., frt. alld lb. .27 - —
Resinate, fused, 3½% Mn, dms. lb. .24 - —
precip., 6½-7% Mn, dms lb .28 - —
Sulfate, fertilizer grade, 65% sulfate, c.l., dlvd. S. E ton. 88.55 - —
l.c.l., dlvd. S. E ton. 95.55 - —
Tallate, 6% dms lb .24 - —
Mangrove bark, E. African, 38% tannin, c.l., ex dock ton. 66.00 - —
So. American, 30% tannin, c.l., ex dock ton. 55.00 -58.00
Mannitol, com'l, fib. dms., ton lots, works lb. .60 - —
dms. to ton lots, works lb. .62 - —
single dm. works lb .65 - —
MBTS (see Mercaptobenzothiazyl disulfide).
MBT (see 2-Mercaptobenzothiazole).
Melamine, bgs., c.l., works lb. .30 - —
l.c.l., works lb. .31 - —
Menadione, USP, bots. gram .044 .05
Menthol, nat., USP, Brazilian, cs lb. 6.30 6.40
syn., USP, racemic, cns lb. 4.95 - —
Menthyl salicylate, tins lb 4.00 4.25
2-Mercaptobenzothiazole, bgs., fib. dms., ton-lots, works, frt. alld lb. .42 - —
less ton lots, same basis lb. .44 - —
Mercaptobenzothiazyl disulfide, bgs., fib. dms., ton-lots, works, frt. alld lb. .52 - —
less ton lots, same basis lb. .54 - —
Mercuric chloride, NF, cryst., dms., 50-lb. lots or more lb. 4.98 - —
gran., or powd., dms., 50-lb. lots or more lb. 4.78 - —
Cyanide, NF, VIII, powd., fib. dms. lb. 6.84 - —
Iodide, red, NF, fib. dms lb 7.72 - —
Oxide, red, NF, powd., fib. dms lb 5.97 6.01
Yellow, tech. (see Yellow mercury oxide).
USP, fib. dms lb. 6.14 - —
Mercurous chloride (see Calomel).
Iodide, yellow, NF lb. 7.72 - —
Mercury, ammoniated (see White precipitate USP)
Metal, 76 lb. per flask, net-flask 253.00 -255.00
Mesityl oxide, dms., c.l., dlvd lb. .14½- —
l.c.l., dlvd lb. .15½- —
tanks, dlvd lb. .12 - —
Meta-aminophenol (see m-Aminophenol).
Metachloroaniline (see m-Chloroaniline).
Metanitroaniline (see m-Nitroaniline)
Metanitroparatoluidine (see m-Nitro-p-toluidine).
Metaphenylenediamine (see m-Phenylenediamine).
Metatoluidine (see m-Toluidine).
Metatolylenediamine (see 2,4-tolylenediamine).
Methanol, nat., denaturing grade, tanks, frt. alld gal. .75 - —
syn., Zone 1, dms., c.l. dlvd. or truckload min. frt. alld. gal. .46 - —
l.c.l., same basis gal. .53 - —
tankwagon, 2,000-4,000 gal. lots, dlvd. Metropolitan area gal. .33 - —
4,000 gal., min., frt. alld. or dlvd gal .30 - —
4,000 gal., min., works, Carteret, Camden, N. J gal. .27½- —
Zone 2, dms., c.l., or truckload min. frt. alld. or dlvd. gal. .49 - —
l.c.l., same basis gal. .56 - —
tankwagon, 2,000-4,000-gal. lots, min., dlvd. Metropolitan areas gal. .36 - —
tanks, 4,000 gal., min., frt. alld. or dlvd. gal. .33 - —
Synthetic methanol zones are:—Zone 1 is all continental U. S. E. of eastern boundaries of Ariz., Idaho and Utah. Zone 2 is remainder of U. S. west of above state boundaries comprising Ariz., Calif., Idaho, Nev., Ore., Utah and Wash.
Methenamine (see Hexamethylenetetramine).
dl-Methionine, fib. dms., frt. alld. 50-lb. or more lb. 3.50 - —
feed grade, 98%, fib. dms., same basis lb. 2.65 - —
Methoxychlor, 50% wettable powder, dealers, dms., cs., frt. alld lb. .61 - .64
Methyl abietate, non-ret. dms., c.l., dlvd. zone 1 lb. .20½- —
l.c.l., same basis lb. .21 - —
hydrogenated, non-ret. dms., c.l., dlvd. Zone 1 lb. .21 - —
l.c.l., same basis lb. .21½- —
Zone 1 includes New England and Middle Atlantic states, Va., W. Va., N. C., Ohio, Ky., Mich., Ind., Ill., Wis., St. Paul and Minneapolis, Minn.; St. Louis, Mo.; Miss., Ala., Ga., Fla., S. C. and Tenn.
Acetone, nat., dms., l.c.l., E. of Miss., frt. alld. gal. .62½- —
syn., dms., c.l., frt. alld. E gal. .63½- —
l.c.l., frt. alld. E lb. .69½- —
tanks, frt. alld. E gal. .48½- —
Synthetic methyl acetone E. territory is all States East of and including Colo., Mont., N. Mex. and Wyo. West territory all states west of those four
Acrylate, dms., c.l., t.l., dlvd lb. .39 - —
l.t.l., dlvd lb. .40 - —
tanks, dlvd lb. .37 - —
Alcohol (see Methanol).
Amyl acetate, dms., c.l., dlvd. E. lb. .16 - —
l.c.l., dlvd. E lb. .17 - —
tanks, dlvd. E lb. .13½- —
Ketone, dms., works lb. 1.05 - —
Anthranilate, cns lb. 2.35 - 2.65
Benzoate, cns., dms lb. .60 - .75
Bromide, jobbers, cyls., various sizes, frt. alld. E lb. .47 - .61
Cellulose, special vis. (1,500-4,000 cps.), 50 lb. bgs, c.l., works lb. .78 - —
2,000-lb. lots and more, same basis lb. .65 - —
smaller lots, frt. alld. on 100 lbs. lb. .89 - 1.00
standard vis. (15,400 cps.), 50-lb. bgs., c.l., frt. alld lb. .60 - —
2,000-lb. lots and more, same basis lb. .72 - —
smaller lots, frt. alld. on 100 lbs lb. .75 - .85

Low Cost Route to Many Products
ROHM & HAAS METHYLAMINES



As low cost sources of basic organic nitrogen, Rohm & Haas methylamines are logical intermediates in dozens of reactions. That's why they're so widely used in products of all descriptions: rubber-vulcanization accelerators, pesticides, surface-active agents, photographic developers, dyestuffs, pharmaceuticals, and quaternary disinfectants among others.

With Rohm & Haas methylamines, you also gain other important advantages:

- *Continuing Availability*—through large volume production in two separate plants.
- *High Quality*—the result of over 20 years' experience in producing amines.
- *The Right Amine*—mono-, di-, or trimethylamine; aqueous or anhydrous form; in drums, cylinders or tankcars.

Write today to Department SP for complete data.

Chemicals for Industry

ROHM & HAAS COMPANY

WASHINGTON SQUARE, PHILADELPHIA 5, PA.

Representatives in principal foreign countries

Methyl chloride, indust., cyls., frt. equald ..lb. .22 - —
tanks, multi-unit, same basis, lb. .15¾- —
single unit, same basis lb. .12 - —
refrigerator mfrs., cyls., dlvd.lb. .46 - .48
other consumers or service men, cyls., dlvd lb. .67 —
Chloroform (see 1,1,1-tri-chloroethane).
Cinnamate, cns ..... lb. 1.53 - 1.80
Cyclohexanol, dms., c.l., works lb. .35½- —
c.l., works ..... lb. .36 —
tanks, works ..... lb. .34 —
Ethyl ketone dms., c.l., dlvd. lb. .14½- —
l.c.l., dlvd ..... lb. .15½- —
tanks, dlvd ..... lb. .12 - —
Formate, refd., dms ..... lb. .35 40
tech. non-ref. dms., any quantity, works lb. 10 —
Heptin carbonate bots ..... lb. 31.00 -42.00
p-Hydroxybenzoate 5lb dms ..... lb. 1.90 - 2.00
Ionone, standard, cns., dms. lb. 5.00 - 5.25
Isobutyl carbinol, dms., c.l., dlvd. lb. .16½- —
l.c.l., dlvd ..... lb. .17½- —
tanks, dlvd ..... lb. .14 - —
Ketone, dms., c.l., dlvd ..... lb. .16½- —
l.c.l., dlvd ..... lb. .17½- —
tanks, dlvd ..... lb. .14 - —
Methacrylate, dms., c.l., t.l., frt. equald, with Melle, W. Va. lb. .31 - —
smaller lots, same basis lb. .31½ —
tanks, same basis ..... lb. .29 —
Naphthyl ketone, cryst., cns lb. 3.00 - 4.30
Parahydroxybenzoate (see Methyl p-Hydroxybenzoate)
Roseaniline chloride, NF, fib. dms., 5-lb lots ..... lb. 5.64 - —
Salicylate USP cns, 500-lb lots lb. .59 - —
Testosterone USP 100-gram bots. gram. .68 - —
2-Methylbenzylamine, dms., l.c.l, works lb. 1.25 - —
2-Methylbenzyl dimethylamine, dms., c.l., works lb. 1.89 - —
l.c.l., works ..... lb. 1.90 - —
2-Mthyl-5-ethyl pyridine, dms., c.l., works lb. .445 - —
l.c.l., works ..... lb. .45 - —
tanks, works ..... lb. .43 - —
Methylene blue, fib. dms., 100-lb. lots, frt. adjusted lb. 3.25 - 3.60
smaller lots, same basis lb. 3.40 - 3.55
Chloride, tech., dms., c.l., dlvd. E. lb. .13¼- —
l.c.l., same basis ..... lb. .16 - —
tanks, same basis ..... lb. .11¾- —
b-Methylnaphthalene, 32°C. m.p., dms., works lb. .90 - —
Methylpentanediol (see Hexylene glycol).
Methylphenylpyrazolone (see 1-Phenyl-3-methylpyrazolone-5).
Methylthionine chloride (see Methylene blue).
Mica, dry grd., paint plastic, 100 mesh, bgs., c.l., works lb. .04 - —
roofing, 20 to 80 mesh, works lb. .03 - —
wet-grd., biotite, bgs., c.l., works, frt. alld. E lb. .06½- —
l.c.l., ex-whse ..... lb. .07¼- —
paint or lacq., bgs., c.l., 325 mesh, works, frt. alld. E lb. .08¼- —
l.c.l. ex-whse or frt. alld. E lb. .09 - —
rubber, bgs., c.l., works, frt. alld. E lb. .08 - —
l.c.l. ex-whse or frt alld. E lb. .08¾- —
wallpaper, bgs., c.l., works, frt. alld. E lb. .08¾- —
l.c.l. ex-whse or frt alld. E lb. .09 - —
white, 5-10 microns, bgs., c.l., works, frt. alld. E lb. .08¼- —
c.l. ex-whse or frt. alld. E lb. .09 —
Mica, wet-grd. W of Miss. ½c. higher; W of Rockies, 1c higher
Mineral spirits (see Petroleum mineral spirits).
Molasses, blackstrap feed grade, tanks, New Orleans gal. .25 - .26
New York ..... gal. .25 - —
Molybdenum (metal), powd., 80 or 200 mesh, ctns, works kilo. 7.84 - —
325 mesh, ctns., works kilo. 9.13 - —
Trioxide, pure, dms., works lb. 1.15 - —
tech., dms., works, basis Mo. content lb. 1.39 - —
Monobutylamine, dms., c.l., E. of Rockies lb. .55½- —
l.c.l., same basis ..... lb. .56½- —
tanks, same basis ..... lb. .53 - —
Monochlorobenzene, dms., c.l., frt., alld or dlvd. E lb. .10 - —
l.c.l., same basis ..... lb. .11 - —
tanks, same basis ..... lb. .08½- —
Monoethanolamine, dms., c.l., dlvd. E lb. .27½- —
l.c.l., same basis ..... lb. .28½- —
tanks, same basis ..... lb. .25 - —
Monoethylalphanaphthylamine (see N-Ethyl-a-naphthylamine)
Monoethylamine 70% contained amine, dms., c.l. dlvd. E lb. .37½- —
l.c.l., dlvd E ..... lb. .38½- —
tanks, dlvd E ..... lb. .35 - —
Monoethylaniline (see N-Ethylaniline).
Monoethylorthotoluidin (see N-Ethyl-o-toluidine).
Monoisopropanolamine, dms., c.l., dlvd. E lb. .27½- —
l.c.l., same basis ..... lb. .28½- —
tanks, same basis ..... lb. .25 - —
Monoisopropylamine dms., c.l., dlvd. lb. .32½- —
l.c.l., same basis ..... lb. .33½- —
tanks, same basis ..... lb. .30 - —
Monomethylamine, 30-35% soln., dms., c.l., frt. equald, 100% basis, lb. .40 - —
l.c.l., frt. equald 100% basis, lb. .40½- —
tanks, frt. equald 100% basis, lb. .31 - —
40% soln., dms. c.l., frt. equald, 100% basis lb. .37 - —
l.c.l., frt. equald, 100% basis, lb. .37½- —
tanks, frt. equald, 100% basis, lb. .31 - —
Monosodium fluoroacetate (see Sodium fluoroacetate monobasic).
Glutamate (see Sodium glutamate monobasic).
Phosphate (see Sodium phosphate monobasic).
Mono-tertiary-butylmetacresol (see 6-tert-Butyl-m-cresol)
Morphine, cns ..... oz. 12.40 -12.60
Acetate, anhyd., cns ..... oz. 9.95 -10.00
Hydrobromide, cns ..... oz. 9.90 - 9.95
Hydrochloride, NF, cns ..... oz. 9.90 - 9.95
Sulfate USP cns ..... oz. 9.90 -10.05
Morpholine, dms., c.l., dlvd E ..... lb. .55¼- —
l.c.l., dlvd E ..... lb. .56¼- —
tanks, dlvd E ..... lb. .52¼- —
Musk, syn., ambrette, 100-lb. lots, fib. dms. lb. 4.45 - 5.15
25-lb. lots, cns ..... lb. 5.05 - 5.65
5-lb. lots, cns ..... lb. 5.20 - 5.50
ketone, 100-lb. lots, fib. dms. lb. 4.70 - 5.30
25-lb lots, cns ..... lb. 5.35 - —
5-lb. lots, cns ..... lb. 5.45 - —
xylol, 100-lb. lots, fib. dms. lb. 1.40 - —
25-lb lots, cns ..... lb. 1.45 - —
5-lb lots, cns ..... lb. 1.50 - —
Mustard seed, Danish, yellow, bgs lb. 10¼- —
Du ch, bgs. ..... lb. .10½- —
English, yellow, bgs. ..... lb. .11 - —
Montana, oriental, bgs ..... lb. .08¼ Nom.
Yellow, bgs ..... lb. .10½- —

Myrobalans, J-1, genuine, bgs., ex-dock ..ton. 63.00 -64.00
crushed, bgs. ex dock ..... ton. 79.00 -80.00
Bombay, bgs., ex dock ..... ton. 61.00 -62.00
Extract, Indian, solid, 55% tannin, bgs., ex dock, plus duty lb. .10 - .10¼

N

Naphtha, painters (see Petroleum naphtha V. M & P.).
Solvent (see S)
Naphthalene, crude dom., 74°, tanks, frt equald lb. 06¼ - —
78° bgs. c.l., same basis lb. .07½ - .08
l.c.l., same basis lb. .07¾ - 08¼
tanks, same basis lb. .07 - —
imp., 78° bgs., large lots lb. .05 Nom.
refd., indust., chipped, crushed, bgs., frt. alld lb. .12½- —
tanks, same basis lb. .11¾ —
balls, flakes, wholesalers, jobbers, bbls. c.l. same basis, lb. .15½ —
cs. 50 lbs. c.l., same basis lb. .15¾- —
1-lb pkgs., c.l., same basis. lb. .18½ —
a-Naphthol bbls. frt. alld lb 1.00 - —
b-Naphthol, tech., flake, bbls., c.l., works lb. .33 - —
l.c.l., works ..... lb. .35 - —
Benzoate, fib dms., works ..... lb 3.00 - —
custom contract works .. lb 1.65 - —
Salicylate, dms ..... lb 5.00 - —
Sulfate, cns ..... lb 35.00 - —
a-Naphthylamine bbls. frt alld lb .50 - —
b-Naphthylamine tech. flake, bbls., works lb. 1.60 - —
Neocinchophen USP dms., frt. adjusted lb. 7.00 - 8.00
Neomycin, fib, dms., 5 kilo lots, basis, activity gram. .45 - —
100-999 gram lots, basis, activity, gram. .55 - —
Nerolin, cns ..... lb. 2.45 - 2.65
Niacinamide (see Nicotinamide).
Nickel acetate, bbls. dlvd ..... lb. .77 - .90½
Carbonate bbls. dlvd ..... lb. .73¾- .81¾
Chloride bbls., dlvd ..... lb. .38½- .46½
Formate, bbls., ton lots, frt. alld lb. .68 - .69
Metal, electro cathodes, cs., works lb. .64½- —
Nitrate, bbls., works ..... lb. .37 - .38
Oxide, black, bbls ..... lb. .76 - —
green bbls ..... lb. .76 - —
Sulfate, bgs., c.l., dlvd ..... lb. .30¼- —
l.c.l. dlvd ..... lb. .31¼- .38¼
Nicotinamide USP dms., frt adjusted kilo 12.00 -12.30
Hydrochloride dms frt adjusted, kilo 11.50 -11.80
Nicotine sulfate, 40%, dealers, 50-lb. dms., frt alld lb. 1.20 - —
manufacturers, 500-lb. dms., frt. alld lb. 1.03 - —
Niger seed, bgs ..... lb. .12 - .12½
Nikethamide, cbys ..... lb. 7.50 - —
m-Nitroaniline, cryst., dms. frt. alld. lb. 1.15 - —
paste, dms., frt alld., 100% basis. lb. 1.10 - —
o-Nitroaniline flaked, dms. t.l., frt. alld lb. .49 - —
l.t.l., frt. alld ..... lb. .51 - —
p-Nitroaniline, dms., frt alld lb 445 —
Nitrobenzene, dbl. dist., dms., c.l., frt. alld lb. .14 - —
l.c.l., frt. alld ..... lb. .15 - —
tanks, frt. alld ..... lb. .12 - —
Nitrocellulose, ester soluble 30-35 cps., ¼, ½ ¾, 5-6, 15-20, 30-40, 60-80, 125-175, secs., bbls., c.l. works lb .34 —
l.c.l., same basis lb. .35 37
18-25 cps bbls., c.l., same basis lb .36 —
l.c.l., same basis lb. .37 .39
250-400, 600-1,000 secs., bbls., c.l., same basis lb. .39 —
l.c.l., same bassi lb. .40 42
spirit-soluble, 30-35 cps., ¼, ½, secs., bbls., c.l., same basis lb. .41 —
l.c.l. same basis lb .42 44
5-6 cps., 40-60 secs bbls., c.l., same basis lb .40 —
l.c.l., same basis lb .41 .43
Denatured alcohol used in the manufacture of nitrocellulose is charged extra. Drums extra but returnable
o-Nitrochlorobenzene dms. c.l. frt. alld lb 15 —
l.c.l., same basis lb 16 —
tanks, same basis lb 13 —
p-Nitrochlorobenzene dms lb 26 27
2-Nitro-4-chlorophenol dms lb 75 —
N-roethane dms. c.l. dlvd. E lb 24 —
l.c.l. dlvd E lb 24¾- —
tanks, dlvd E lb 22½ —
Nitroethane prices West of Rockies are 1c. higher.

EXPLORING NEW TERRITORY?

...Hydroxylamine salts* may apply in your field

For synthesis—
Hydroxylamine salts may be used to make oximes, hydroxamic acids, and numerous intermediates. They are useful for preparation of anti-skinning agents, anti-rusting agents, and pharmaceuticals.

As acid-stable reducing agents—For metallic ions such as ferric, cupric, silver, and for nonmetallics such as dyes, peroxides, and nitrites. These compounds are useful in purification processes, dyeing of acrylic fibers and as a short-stopper for catalyzed polymerization reactions.

As oxidizing agents—
This is new territory that needs exploring. Hydroxylamine salts are probably mild oxidizing agents.

Effects on proteins and biological systems—
Hydroxylamine salts inhibit enzymes such as catalase, harden gelatine . . . derivatives are good fungicides and bactericides. For the most part, this is a poorly explored area suitable for intensive experimentation.

***Hydroxylammonium Acid Sulfate**
$NH_2OH \cdot H_2SO_4$
Hydroxylammonium Sulfate
$(NH_2OH)_2 \cdot H_2SO_4$
Hydroxylammonium Chloride
$NH_2OH \cdot HCl$

Already known for their wide range of utility, these nitroparaffin derivatives may find dramatic uses from future research. Their potential applications for experimentation are almost unlimited.

For more details on these and other uses for Hydroxylamine salts, mail the coupon below.

COMMERCIAL SOLVENTS CORPORATION
Industrial Chemicals Department • 260 Madison Ave. • New York 16, N. Y.
Please send me data sheets #19 and #19A for information on Hydroxylamine salts.

Name _____ Title _____
Company _____
Street _____
City _____ Zone ____ State _____

Nitrogen Solutions—Oil, Paraffin

Nitrogen solutions, tanks, frt. equald, unit-ton 1.14 - —
Nitrogenous process tankage, bulk, works unit-ton 3.00 4.00
Sewage sludge, bulk, works, unit-ton 2.95+ .50
Nitromethane, dms., c.l. dlvd. E lb. .24 - —
l.c.l., dlvd E lb. 24¾- —
tanks dlvd. E lb. 22½- —
Nitromethane prices West of Rockies are 1c. higher
a-Nitronaphthalene, bbls., frt. alld. lb. .41 - —
Nitropropane-1 and -2, dms., c.l., dlvd. E lb. 22½- —
l.c.l. dlvd E lb. 23¼- —
tanks, dlvd. E lb 21 - —
Nitropropane prices West of Rockies are 1c. higher.
o-Nitrophenol, dms., works, frt. equald lb. .94 - —
p-Nitrophenol, dms., frt. alld., c.l. lb. .51 - —
l.c.l., lb. 53 - —
o-Nitrotoluene, dms., c.l., frt. alld lb .10 - —
l.c.l. frt alld lb 11 - —
tanks, frt alld lb 09 - —
m-Nitro-p-toluidine, dms lb. 1.59 - —
Nitrous ether, cone., bots 100-lb. lots lb 1.28 1.35
Nonyl phenol, dms., c.l., frt. alld. lb. 26½- —
l.c.l., frt. alld lb. 27½- —
tanks, frt. alld lb .24½- —

Nutgalls, Aleppo, bgs lb. .36 - .38
Chinese, bgs lb No prices.
Nutmeg, East Indian, bgs lb. .92 - —
West Indian, bgs lb. .91 - —
Nux vomica, bls lb. .10 - .12
powd., bbls., bxs lb .15 - .17

O

Octane, indust., tanks, Bayonne, N J gal. .19 —
Baytown, Tex gal. 15¾- —
Borger, Tex gal. 15¾- —
1-Octanol, tech., dms., c.l., dlvd. lb. .35 - —
l.c.l. dlvd lb. .37 - —
tanks, dlvd lb. 32½- —
Octyl phenol, bgs., c.l., works lb. .24 - —
l.c.l., works lb. 24½- —
tanks, works lb .23 —
Drum prices for octyl phenol are 11c higher

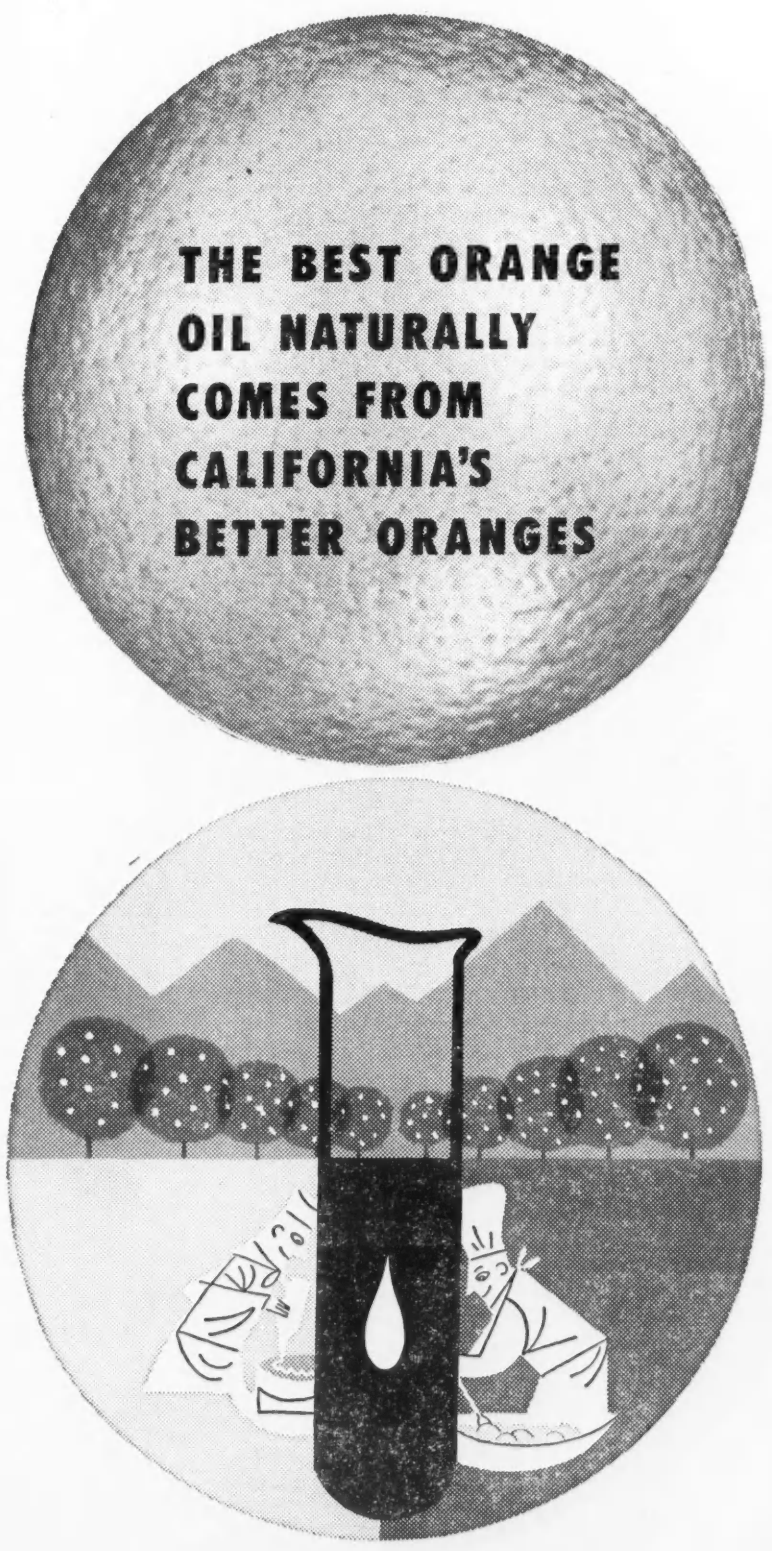
(Essential oils prices listed below are f.o.b. New York, with differences between high and low quotations due to differences in quantity, quality or in individual suppliers' views.)

Oil, abies, siberica, cns lb. 4.00 - —
Almond, artif., bitter (see Benzaldehyde)
nat., bitter, F.P.A. bots lb 3.00 3.75
NF, bots. lb 3.25 3.75
sweet, USP, cns, dms lb. 1.25 - —
Allspice (see Oil, pimento).
Amyris, dms. lb 1.25 - —
Oil, angelica root, bots lb. 66.00 -100.00
seed, bots lb. 56.00 -95.00
Aniline (see A).
Anise, USP, dms lb. 3.50 - 4.00
Apricot, kernel, USP, dms lb. .48 - .65
Avocado, cns. lb. 3.25 - —
Bay, NF, Puerto Rican, 50-55%, cns lb. 2.15 - 3.00
55-60%, cns lb. 2.50 - 3.00
West Indian, 50-55%, cns., dms., lb. 1.85 2.40
Bergamot, nat., NF Italian, cns. lb. 9.75 -11.00
Birchtar, crude, cns lb. 1.50 - 1.90
rectified, NF cns lb. 1.75 - —
Bois de rose, Brazil, dms lb. 3.70 - —
Mexican (see Oil, lignaloe wood).
Bone, dms., works lb. .65 - .70
Cajeput, native, cns. lb. 1.75 - 3.30
redist., USP, cns lb 2.25 3.40
Calamus, bots lb. 12.00 -20.00
Camphor, sassafrassy, dms. lb. .30 - .45
white, dms lb 29 —
Cananga, native, cns lb. 8.50 - 8.75
rectified, cns lb. 10.00 -13.00
Caraway, NF, cns lb. 3.65 - 4.00
Capsicum (see Capsicum oleoresin).
Cardamom, NF, bots lb. 38.00 -40.50
Cassia, USP (see Oil, cinnamon, USP)
Castor, blown, dms., c.l. lb. .2700- —
l.c.l. lb. .2800- —
dehydrated, bodied, dms., c.l. lb. .2860- —
l.c.l. lb. .2960- —
tanks lb. .2660- —
unbodied, dms., c.l. lb. .2710- —
l.c.l. lb. .2810- —
tanks lb. .2510- —
hydrogenated, bgs., c.l., dlvd. lb. .2825- —
l.c.l., dlvd lb. .3425- —
No. 1 tech., dms., c.l. lb. .2125- —
l.c.l. lb. .2250- —
tanks lb. .1950- —
No. 1, Brazilian, tanks lb. .2050- —

Oil, castor, USP, dms., c.l. lb. .2500- —
l.c.l. lb. .2600- —
tanks lb, .2300- —
sulfonated, 50%, dms., works, lb. .13½- .14½
75% dms., works lb. .17½- 18½
Cedarleaf, USP, XIII, cns., dms. lb. 3.65 - —
Cedarwood, cns., dms lb. .75 - 1.00
Celery seed, bots. lb. 8.00 -20.00
Chamomile, blue, Hungarian, bots. lb 190.00-195.00
Chenopodium, NF, cns lb. 3.90 - —
Chinawood (see Oil, tung).
Cinnamon, bark, bots lb. 36.00 -70.00
leaf, crude, dms lb. 1.60 - 2.00
USP, cns., dms. (Cassia) lb 10.25 -10.90
Citronella, Ceylon, cns., dms. lb. .86 - —
Java, cns lb 1.95 - —
Java-type, cns. lb. 1.25 - —
Clove, bud, USP, cns., dms lb. 2.65 - 2.90
leaf, crude, dms lb 1.20 - 1.50
Coconut, crude, tanks, N. Y. lb. .12¼- —
Pac. coast lb. .11½- —
refd. Cochin type dms, tax incl., lb. .19 - .19½
deodorized, tax incl., dms lb. .22 - .23
Cod, Newfoundland, dms lb. .11½- .11¾
Codliver, USP, dms gal. 1.45 - 1.55
Copaiba, cns. lb. 1.75 - 2.50
Coriander, USP bots. lb. 11.75 - —
Corn, crude, tanks, works lb. .14¼- —
foots (soapstock), acid 95%, tanks, N. Y. lb. .05½- —
refd., salad, dms lb. .1983- .2000
tanks lb. .1783- —
Costus, bots. oz. 8.00 - —
Cottonseed, crude, tanks South East lb. .14 - —
Valley lb. .13¾- —
Texas, Lubbock lb. .13¾- —
Waco lb. .14 - —
foots (soapstock), acid 95%, tanks, N. Y. lb. .04⅞- —
refd., salad, dms lb. .19⅜- .19⅝
tanks lb. .17⅜- —
Creosote (see Creosote, coaltar).
Cubeb, cns lb. 4.10 - 4.25
Cumin, bots., cns lb. 4.75 - 5.00
Cypress, bots lb. 5.30 —
Degras (see D).
Dillseed, bots lb. 2.80 - 4.25
Dillweed, dom., bots., dms lb. 3.25 - 4.25
Dip (see D).
Erigeron, cns lb 5.50 7.50
Eucalyptus, NF, rect., 70-80% dms. lb. .62 - —
80-90%, dms lb 72 - —
Fennel, sweet, USP, cns lb. 2.85 - —
Fir, Canada, cns lb. 4.75 - —
Fish, refd., alkali, dms lb. .1400- .1450
kettle-bodied, dms lb. .1630- .1680
light-pressed, dms lb. .1250- .1300
tanks lb. .1100- —
Fishliver, crude for feeds or concentrating 4,000 to 12,000 A units per gram dms., 1,000,000 units. .08 .09
10,000 to 20,000 A units per gram, dms., 1,000,000 units. .09 .10
25,000 to 35,000 A units per gram, dms. 1,000,000 units. .09 .10
40,000 to 55,000 A units per gram, dms. 1,000,000 units. .10½ .11
100,000 A units per gram., dms 1,000,000 units. .14 - —
200,000 A units per gram., dms 1,000,000 units. .15½- —
500,000 A units per gram., dms 1,000,000 units. .16 - —

Prices above are based on the USP XIV method of conversion, Morton Stubbs Corrected E x 1900.

Fusel (see F).
Garlic, pure, bots oz. 4.75 - —
Gaultheria (see Oil, wintergreen)
Geranium, Algerian, cns lb. 13.50 -14.50
Bourbon, cns. lb. 13.75 - —
Turkish (see Oil palmarosa)
Ginger, dist., bots lb. 18.50 -19.50
Grapefruit, dms lb 1.70 3.25
Grease, No. 1, dms., c.l. lb .15¼- —
l.c.l. lb. .16¼- .18¼
extra, winter, strained, dms., c.l. lb. .17¼- —
prime, burning, dms, c.l. lb. .18¾- —
l.c.l. lb. .19¾- .21¼
Guaiacwood, cns. lb. 1.60 - —
Hemlock, cns lb. 2.10 - 2.50
Juniper berry, NF, VIII, bots. lb. 2.75 - 4.00
twice rectified, bots lb. 3.60 - 7.00
Tar, NF (see Juniper tar).
Wood, tech., cns. lb 38 .55
Lard (see Oil, grease)
Laurel leaf, dms., cns lb. 9.75 -12.50
Lavandin, dms., cns lb. 2.55 - 2.95
Lavender, flower, USP, French 35-37% ester, cns lb 2.85 - 4.60
38-40% ester, cns lb. 9.25 -10.00
40-42% ester, cns lb. 10.00 -14.00
spike, Spanish, cns lb. 2.05 - 2.60
Lemon, USP, Calif., cns., dms lb. 4.25 - 5.00
Messina, cns lb 5.75 - —
terpeneless, bots lb 50.00 -85.00
Lemongrass, cns., dms lb. 1.75 - —
Lime, dist., Mexican, cns lb. 4.50 - —
West Indian, cns lb. 4.50 - —
expressed, West Indian, cns lb 6.00 8.00
terpeneless, bots. lb 30.00 -85.00
Lignaloe wood, Mex., cns lb. 4.65 - —
Linseed, raw, dms., c.l., N. Y. lb. .1700- —
l.c.l. lb. .1800- .1830
tanks, f.o.b. Minneapolis lb. .1570- —
New York lb. .1500- —
tankwagon, New York lb. .1530- .1540
Boiled linseed oil 006c per lb higher
Mace, dist., cns., dms lb. 9.00 - —
Mandarin (see Oil, tangerine)
Menhaden, crude, tanks, works, Atlantic & Gulf lb. .08¾- .09
Mineral, white (see Oil, white mineral).
Mirbane (see Nitrobenzene)
Mustard seed, nat., dms. lb. 17½ Nom.
syn., bots lb 1.60 - 1.85
Neatsfoot, 15° cold test, dms lb .30 - .33
20° cold test, dms lb .29 - .32
30° cold test, dms lb .28 - .31
Neroli, NF, French bots lb 575.00 - —
Nutmeg, USP, dist., East Indian, cns., dms lb. 9.00 - —
West Indian, cns., dms lb. 9.00 - —
Ocotea cymbarum, dms lb .50 .60
Oiticica, liq., dms lb. .16 - .16½
tanks lb. .14½- —
Oleo, extra, dms lb. .19 - .19⅛
Olibanum, bots lb 5.50 7.65
extra fine, bots lb 8.00 9.00
Olive, edible, Spanish, dms., duty paid gal. 3.30 - 3.40
expressed, USP, Brazilian, cns., dms lb No stocks.
Calif., cns. dms. .60 - 1.75
Florida, cns., dms lb. .50 - .60
Messina, cns. lb 3.85 - 5.85
West Indian, cns., dms lb 2.50 - 3.65
sesquiterpeneless, bots. lb 65.00 -120.00
Origanum, Spanish, cns lb 2.00 —
Palm, clarif., dms lb. .1550 .1650
Palmarosa, cns. lb. 8.25 - 9.00
Paraffin, pale, 100-110 vis., at 100° F. tanks, East Coast refy gal. .14 —



OIL OF ORANGE, U.S.P.

Flavor is the most important factor in your finished product. Better *orange* flavor naturally comes from *better oranges*, and all tests prove California oranges are richer in flavor strength, more intense in aromatic constituents.

Wherever you use Oil of Orange, be sure your supplier provides Exchange Brand California Oil of Orange. No other oil of orange has the world-wide reputation of Exchange Brand, produced by the people who know citrus best—the Sunkist Growers of California.

Flavor is one of your least expensive ingredients. Doesn't it seem foolish to settle for cheaper, inferior orange oil when flavor is so important yet costs so little? Ask your supplier for Exchange Brand Oil of Orange, with its consistent year-after-year quality and its richer orange flavor.

Exchange

Sunkist Growers

Products Department • Ontario, California

Distributed in the U.S. and Canada by
Dodge & Olcott, Inc., 180 Varick St. New York 14, N.Y.
Fritzsche Brothers, Inc., 76 Ninth Ave. New York 11, N.Y.
Ungerer & Company, Inc. 161 Avenue of the Americas New York 13, N.Y.

Inquiries from countries other than the U.S. and Canada should be directed to the Products Department, Sunkist Growers.

Oil, patchouli, dms ..... lb. 5.50 - —
Peach kernel USP (see Oil apricot kernel).
Peanut, crude tanks, f.o.b. mills, lb. .17 - —
refd., dms ..... lb. .22¾ - .24
tanks ..... lb. .20¾ - —
Pennyroyal USP, imported, cns. lb 2.75 3.50
Peppermint, nat., dms ..... lb. 4.75 - 6.50
redist., USP, dms ..... lb. 5.20 - —
Persic, USP (see Oil, apricot kernel).
Petitgrain South American, cns., dms. 3.05 - 1.75
Pimento berry, NF, dms ..... lb 4.50 - 5.00
leaf, cns. ..... lb. 2.05 - 2.60
Pine, dest.-dist., dms., l.c.l., works, lb. .12¼ - —
ex whse. ..... lb. .14¼ - —
steam-dist., dms., ex whse. N.Y.C lb. .176 - —
dlvd. ..... lb. .179 - —
Pineneedle, Siberian (see Oil, abies siberica).
Rapeseed, tankcars ..... lb. .18½ - —
Red (see Acid, oleic).
Rice bran, clarif., dms., l.c.l. lb. .18 Nom.
tanks, dlvd. E ..... lb .15 - .15½
Rose, nat., Bulgarian, bots oz. 43.00 -57.00
Rosemary, Spanish, USP, cns., dms lb. .60 1.00
tech., cns., dms ..... lb. .50 .70
Rue, bots ..... lb. 2.00 2.50
Safflower, dms., N. Y. ..... lb. .1785- .1835
tanks, same basis ..... lb. .1585- —
Sage, clary bots ..... lb. 18.75 -19.00
Dalmatian, cns ..... lb. 4.10 - 4.65
Spanish, cns. ..... lb 1.20 - 1.45
Sandalwood, NF, cns ..... lb. 13.50 - —
Sardine crude tanks, Pac. coast, lb. .08½ - .08¾
Sassafras, artif., dms ..... lb. .48 - .60
nat., dom., USP, dms ..... lb. 1.45 2.10
imp. Brazilian (see Oil ocotea cymbarum).
Savin, cns ..... lb. 2.75 - —
Savory, cns. ..... lb. 4.25 - —
Sesame, refd., dms ..... lb. .38 - .39
Shingle stain, tar distillate, dms., c.l., works gal. .35 - —
l.c.l., works ..... gal. .44 - —
tanks, works ..... gal. .23 - —
Snakeroot, Canada, cns ..... lb. 27.50 -31.00
Soybean, crude, tanks, Decatur, lb. .13½ - —
foots soapstock, acid, 95% tanks, N. Y. lb. .06 - —
refd., alkali, dms ..... lb. .1795- .1825
tanks ..... lb. .1585- —
clarified, dms ..... lb. .1745- .1775
tanks ..... lb. .1545- —
salad, dms ..... lb. .18¼ - .18¾
tanks ..... lb. .16¼ - —
Spearmint, USP, dms ..... lb. 4.10 - 5.00
Sperm bleached winter 45° dms. lb. .1675- .1725
tanks ..... lb. .1500- —
nat. winter, 45°, dms ..... lb. .1575- .1625
tanks ..... lb. .1400- —
Spruce, cns., dms ..... lb. 2.10 - 2.75
Sweet birch USP Northern cns. lb 4.25 9.50
Southern, cns ..... lb. 2.30 2.75
Tall, crude, dms., c.l., works lb. .03¾ - .04¼
tanks, works ..... lb. .02½ - —
dist., dms., c.l., works ..... lb. .07½ - —
l.c.l. works ..... lb. .07¾ - —
tanks, works ..... lb. .06¼ - —
refd., dms., c.l., works ..... lb. .06½ - .06¾
lb. .06½ - .06¾
l.c.l. works ..... lb. .06¾ - .07¾
tanks, works ..... lb. .05¼ - .05¾
Tallow, acidless, dms., c.l. ..... lb. .13½ - —
l.c.l. ..... lb. .14½ - .16
Tangerine Floridian dms ..... lb 2.00 - 3.30
Tansy, dms ..... lb. 7.50 8.40
Tar acid (see T's).
Pine, comm. dms., c.l., works lb. .0561- —
l.c.l., works ..... lb. .0634- —
whse ..... lb. .0745- —
tanks works ..... lb. .046 - —
rectified, NF, dms., incl., l.c.l., works, South gal. 1.05 - —
ex whse. N. Y. C gal. 1.15 - —
refd., dms., incl., l.c.l., works, gal. .92 - —
N. Y. whse. ..... gal. 1.02 - —
Theobroma (see Cocoa butter).
Thyme, NF, red, cns, dms ..... lb. 1.45 - 1.75
white, cns ..... lb. 1.70 2.00
tech. white cns ..... lb 40 1.85
Tung, dms., c.l., N. Y. ..... lb. .24½ - —
l.c.l., same basis ..... lb. .25 - .25½
tanks, N. Y. ..... lb. .23 - —
domestic mills ..... lb. .22 Nom.
Turkey red (see Oil, castor, sulfonated).
Turpentine NF cns. dms. lb 28 45
Veviter, Bourbon, cns ..... lb. 11.75 -11.90
Haitian, cns. ..... lb. 9.25 -11.00
Java cns ..... lb. 18.50 -20.00
Wheat, germ, 5-gal. dms ..... gal. 11.20 - —
White mineral, tech., 50-65 vis., non-ret. dms. c.l., t.o.b. N. Y gal. .55 - —
65-75 vis., non-ret., dms. c.l., same basis gal. .56 - —
l.c.l., same basis gal. .61 - —
80-90 vis., non-ret., dms., c.l., same basis gal. .57 - —
l.c.l., same basis gal. .62 - —
135-138 vis., non-ret. dms., c.l., same basis gal. .63 - —
l.c.l., same basis gal. .68 - —
145-155 vis., non-ret. dms., c.l., same basis gal. .69½ - —
l.c.l., same basis gal. .74½ - —
USP, 180-190 vis., non-ret. dms., c.l., same basis gal. .71 - —
l.c.l., same basis gal. .76 - —
200-210 vs., non-ret. dms., c.l., same basis gal. .75 - —
l.c.l., same basis gal. .79 - —
345-355 vis., non-ret. dms., c.l., same basis gal. .78½ - —
l.c.l., same basis gal. .84½ - —
Wintergreen, USP, nat., Northern, cns lb. 6.35 -10.30
Southern cns lb. 3.20 -19.50
syn (see Methyl salicylate).
Wood (see Oil, tung).
Wormseed (see Oil, Chenopodium, NF).
Wormwood, cns ..... lb. 5.50 6.85
Ylang-ylang, Bourbon, bots ..... lb. 14.00 -16.00
extra, bots ..... lb. 28.00 -40.00
Madagascar bots ..... lb No stocks
Oleostearine, dms ..... lb. .14½ - .15
Opium USP, cns ..... oz. 19.20 -19.45
gran., USP, cns ..... oz. 21.65 -21.90
powd USP cns ..... oz. 21.65 -21.90
Orange cadmium-selenide lithopone, light shade, bbls., frt. alld E. of Rockies lb. 1.80 - —
deep shade, bbls ..... lb. 2.00 - —
Cadmium-mercury lithopone, deep shade, bbls lb. 1.78 - —
Chrome, CP, bbls., dlvd. N. of Tennessee and N.C., E. of Miss. R., include Davenport, Tenn., and E. of Minneapolis, Rock Island St. Louis St. Paul lb. .33 - .33½
Chrome orange prices are ½c. higher dlvd. Ala., Fla., Ga., La. (Shreveport); 1½c. Miss., N. C., S. C., Tenn., Dallas and Ft. Worth, Tex., El Paso, Tex.; 2c. Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph; 1.6c. higher dlvd. Pac. Coast for Denver, Pueblo, Salt Lake City. Wichita prices are equalized with Chicago.
Dinitroaniline toner CP ..... lb. 1.45 - —
Mineral American, bbls., l.c.l., works lb. .2235- —
Molybdated, bbls. ..... lb. .46 - .46½
o-Nitroaniline toner, kegs. .... lb. 1.15 - —

Orange peel, bitter, Haitian, bls lb. .14 - .16
sweet, bls. ..... lb. .16 - .18
Orris root, Florentine, bls ..... lb. .55 - —
powd., bbls., bxs ..... lb. .68 - —
Verona, bls. ..... lb. .35 - .40
powd., bbls., bxs ..... lb. .45 - —
Orthoaminobiphenyl (see o-Aminobiphenyl)
Orthoanisidin (see o-Anisidine).
Orthochloroanilin (see o-Chloroaniline).
Orthochlorobenzaldehyde (see o-Chlorobenzaldehyde)
Orthochloroparanitroanilin (see 2-Chloro-4-nitroaniline).
Orthochlorophenol (see o-Chlorophenol).
Orthocresol (see o-Cresol).
Orthodichlorobenzene (see o-Dichlorobenzene).
Orthonitroanilin (see o-Nitroaniline).
Orthonitrochlorobenzene (see o-Nitrochlorobenzene).
Orthonitrobiphenyl (see o-Nitrobiphenyl)
Orthonitroparachlorophenol (see 2-Nitro-4-chlorophenol).
Orthonitrophenol (see o-Nitrophenol).
Orthonitrotoluene (see o-Nitrotoluene).
Orthophenetidin (see o-Phenetidine)
Orthophenylphenol (see o-Phenyl phenol).
Ortho-tertiary-amylphenol (see o-tert-Amylphenol).
Orthotolidin (see o-Tolidine base).
Orthotoluidin (see o-Toluidine).
Osage, orange, cryst. No. 1, bbls. l.c.l. lb. .40 - —
extract, liq. No. 1, bbls., l.c.l., lb. .19 - —
Ouabain, USP bots .... gram. 3.00 - 4.00
Oxyquinolin sulfate, cns. 100-lb. lots, works lb 4.75 5.00
smaller lots, works ..... lb. 4.92 - 5.17

P

Papain, USP, African, bots ..... lb. 3.50 - 4.00
Ceylon ..... lb. 3.00 3.50
Papaverine, nat. or syn hydrochloride USP cns., 25-oz. to 100-oz. lots oz. 5.00 - —
smaller lots ..... oz. 5.05 5.20
Sulfate cns. ..... oz. 7.10 7.35
Paprika, Roumanian, bgs ..... lb. 26 - —
Spanish, bgs ..... lb. .43½ - .45
Yugoslavian, bgs. ..... lb. .37 - —
Para-aminophenol (see p-Aminophenol).
Para-anisidin (see p-Anisidine)
Parachloro-orthonitroanilin (see 4-Chloro-2-nitroaniline)
Parachloranilin (see p-Chloraniline).
Parachlorobenzaldehyde (see p-Chlorobenzaldehyde).
Parachlorophenol (see p-Chlorophenol).
Paracresol (see p-Cresol)
Paradibromobenzene (see p-Dibromobenzene).
Paradichlorobenzene (see p-Dichlorobenzene).
Paraffin, crude, scale, white, 123°-127°F, ASTM, tanks, refy. lb. .0710- —
fully refd., 122°-124°F, ASTM, tanks, refy lb. .0815- —
125°-127°F, ASTM, tanks, refy lb. .0815- —
130°-132°F, ASTM, tanks, refy lb. .0815- —
132°-134°F, ASTM, tanks, refy lb. .0815- —
Paraffin, fully refd., 135°-137°F, ASTM, tanks, refy lb. .0815- —
AMP temperatures are an arbitrary 3°F higher than ASTM
Paraformaldehyde, 91% flake, bgs., c.l., frt. alld lb. .11¼ - —
l.c.l., frt. alld lb. .13¼ - .14¼
powd., bgs., c.l., frt. alld lb. .16 - —
l.c.l., frt. alld ..... lb. .17½ - —
USP, X, fib dms., c.l. ..... lb 183 —
1,000-lb lots ..... lb 193 —
smaller lots ..... lb 208 —
Paraldehyde, tech., 55-gal. dms., c.l., works lb. 14 —
l.c.l., works lb 15 —
tanks, works lb. .11½ —
Paranitroanilin (see p-Nitroaniline).
Paranitrochlorobenzene (see p-Nitrochlorobenzene)
Paranitrotoluene (see p-Nitrotoluene).
Paranitrophenol (see p-Nitrophenol)
Paraphenetidin (see p-Phenetidine)
Paraphenylenediamine (see p-Phenylenediamine).
Paraphenylphenol (see p-Phenylphenol)
Para-tertiary-amylphenol (see p-tert-Amylphenol).
Para-tertiary butylphenol (see p-tert-Butylphenol).
Parathion, spray powder, 15%, dealers, bgs., dms. frt. alld lb. .50 .53
tech., dms., c.l., t.l., works lb 1.3395- —
l.c.l., works lb 1.51 —
Paratoluenesulphonamide (see p-Toluenesulfonamide).
Paris green, dealer, dms., c.l., frt. alld lb. .44 - .47
l.c.l., same basis ..... lb. .45 - .48

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Maleic Anhydride • Sodium Sulfite • Pentaerythritol • Pentachlorophenol

REICHHOLD CHEMICALS, INC., RCI BUILDING, WHITE PLAINS, N. Y.

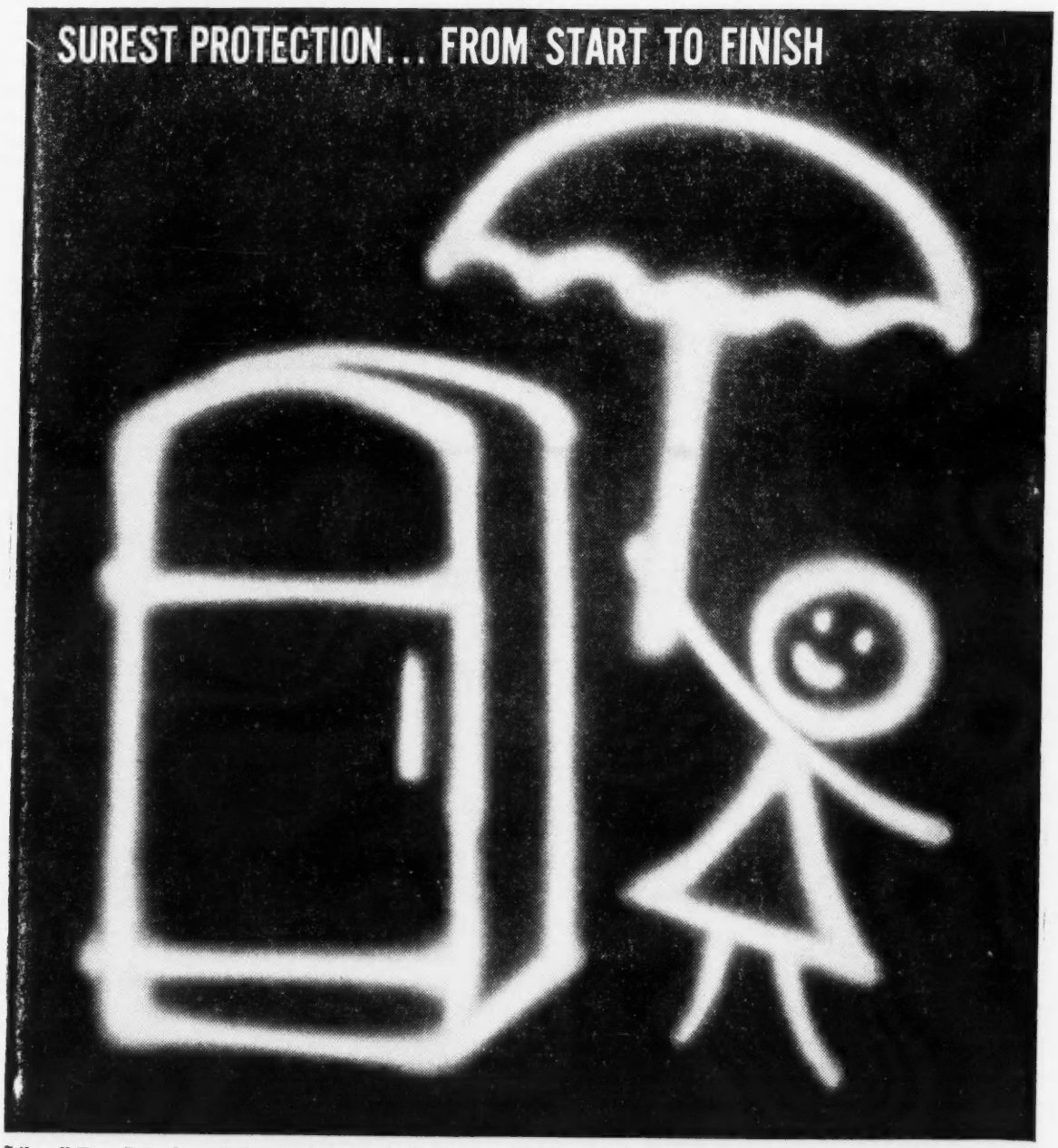
Passion Flower Herb—Phosphorous Sesquisulfide

Passion flower herb, bls. ..... lb. .25 - —
Peanut meal, 45%, old process, bgs., mills ton 55.00 Nom.
Pectin, citrus, NF, powd., bbls lb 2.05 2.06
tech., powd., bbls. lb. 1.25 —
imported, Danish, ex whse lb. 1.28 —
Penicillin, crystalline, potassium, bulk 1,000,000 units. .050 - .057
Procaine, bulk ... 1,000,000 units. .050 - .057
Sodium, bulk .... 1,000,000 units. .0475- .0695
Pentachlorophenol, dms., c.l., t.l., works, frt. equald lb. .22 —
l.c.l., same basis lb. .23½ .30
Pentaerythritol, tech., bgs., c.l., works lb. .32 —
l.c.l., works lb. .33 - —
Di- and tri-isomers (see Dipentaerythritol and Tripentaerythritol).
Pentane, indust., tanks., Tex. refy. gal. .13 - —
Pepper, black, Malabar, spot bgs. lb. .28½- —
red, Gondar, spot bgs. lb. No prices.
Japanese, hontaka bgs ..... lb. .34 - —
nirdseyes, bgs, new crop lb. No prices.
Mombasa, bgs. shipt ..... lb. .56 .57
Nigerian, bgs ..... lb. .42 - —
Turkish, bgs. ..... lb. .28 - —
white, bgs ..... lb. .35 - .36
Peppermint leaves, USP, dom., bls., dms lb. .70 - .75
imp., bls ..... lb. .85 - —
Perchloroethylene, dms., c.l., or truckloads, dlvd lb. .13 - —
l.c.l., dlvd. ..... lb. .14½- —
tanktruck, 1,000 gal., min. dlvd lb. .12 - —
tanks dlvd. ..... lb. .11½- —

Peru balsam, dms ..... lb. 1.35 - —
Petrolatum, extra amber, dms., c.l., refy lb. .06½- —
l.c.l., dlvd ..... lb. .08¼- —
tanks, refy. ..... lb. .04¼- —
cream, dms., c.l., refy ..... lb. .07½- —
l.c.l., dlvd. ..... lb. .09¾- —
tanks, refy. ..... lb. .05¼- —
USP, white, lily, dms., c.l., refy. lb. .07⅞- —
l.c.l., dlvd ..... lb. .10⅛- —
tanks, refy. ..... lb. .05⅝- —
snow, dms., c.l., refy ..... lb. .03⅜- —
l.c.l., dlvd ..... lb. .10⅝- —
tanks, refy ..... lb. .06⅛- —
yellow, soft, dms., c.l., refy lb. .06½- —
l.c.l., dlvd ..... lb. .03¼- —
tanks, refy ..... lb. .04¼- —
Petroleum, lacquer diluent, 150°-240°F, b.r., tanks West Coast, ex tax, Los Angeles, gal. .169 .204
East coast, N. J., N. Y. gal. .19 —
Group 3, benzol-type gal. .14125- .14625
toluol-type gal. .13125- .13375
Mineral spirits, reg., tanks, Calif., ex tax, San Francisco gal. .164 - —
East coast, N.J., N.Y gal. .17 - —
Group 3 ..... gal. .11875- —
tankwagon, Boston .... gal. .19 - —
Buffalo ..... gal. .195 - —
Chicago ..... gal. .279 - —
Cleveland ..... gal. .22 - —
Newark ..... gal. .18 - —
New York ..... gal. .18 - —
Philadelphia ..... gal. .185 - —
Pittsburgh ..... gal. .18 - —
Providence ..... gal. .195 - —

Petroleum, mineral spirits, reg., odorless, tanks, refy, Watson, Cal. gal. .245 - —
Borger, Tex. ..... gal. .24 - —
Houston, Tex. ..... gal. .24 - —
Wood River, Ill. ..... gal. .2625- —
N. J., dlvd ..... gal. .32 - —
N. Y., dlvd ..... gal. .33½- —
tankwagon, N. J., dlvd gal. .36 - —
N. Y., dlvd. ..... gal. .37 - —
Naphtha, cleaners, tanks, East Coast, N. J., and N. Y. gal. .17 - —
Group 3 ..... gal. .12875- —
tankwagon, Newark ..... gal. .18 - —
New York ..... gal. .18 - —
Philadelphia ..... gal. .185 - —
High solvency (see Petroleum solvent, partial aromatic).
VM&P, 225°-300°F., b.r., tanks, West Coast, Los Angeles gal. .169 - —
Portland, Ore gal. .175 - —
San Francisco gal. .174 - —
Seattle, Wash gal. .175 - —
East Coast, N. J. and N. Y gal. .18 - —
Group 3 ..... gal. .12875- —
tankwagon, Boston ..... gal. .205 - —
Chicago ..... gal. .289 - —
Cleveland ..... gal. .23 - —
Newark ..... gal. .195 - —
New York ..... gal. .195 - —
Philadelphia ..... gal. .20 - —
Pittsburgh ..... gal. .19 - —
Solvent, partial aromatic, tanks, 205°-282°F., b.r., 41°C., m.a.p., N. Y., N. J gal. .245 - —
212°-278°F b.r., 43°C. m.a.p., N. J gal. .26 - —
212°-284°F. b.r., 19°C. m.a.p., N. J. gal. .29 - —
224°-280°F., b.r., 48°C. m.p.a., Houston gal. .215 - —

Petroleum solvent, partial aromatic, tanks:—
273°-361°F. b.r., 29°C. m.a.p., N. J gal. .29 - —
282°-325°F. b.r., 41.5°C. m.a.p. Houston gal. .25 - —
287°-386°F., b.r., 31°C., m.a.p., N. J. gal. .29 - —
310°-314°F., b.r., 13.5°C., m.a.p., Texas City gal. .33 - —
310°-348° b.r., 17°C., m.a.p., N. Y., N. J gal. .35 - —
320°-360°F., b.r., 16°C., m.a.p., N. Y., N. J gal. .33 - —
324°-349°F., 37°C., m.a.p., Houston gal. .33 - —
341°-390°F., b.r., 35°C., m.a.p., N. J gal. .27 - —
352°-413°F., b. ., 30°C., m.a.p. Houston gal. .33 - —
358°-401°F., b.r., 25°C., m.a.p., N. Y., N. J. gal. .39 - —
364°-404°F b.r., 19°C. m.a.p., N. Y., N. J gal. .425 - —
367°-418°F. b.r., 19.6°C. m.a.p., N. Y., N. J gal. .33 - —
Rubber, tanks, Cal., ex tax, San Francisco gal. .173 - —
East Coast, N. J., N. Y., gal. .18 - —
Group 3 gal. .12875- —
Stoddard, tanks, East Coast, N. J., N. Y. gal. .17 - —
Group 3 ..... gal. .12375- —
Pennsylvania western gal. .15 - —
tankwagon, Boston ..... gal. .19 - —
Chicago ..... gal. .289 - —
Cleveland ..... gal. .22 - —
Los Angeles, ex tax ... gal. .194 - —
Newark ..... gal. .18 - —
New York ..... gal. .18 - —
Philadelphia ..... gal. .185 - —
Pittsburgh ..... gal. .18 - —
Sulfonate, oil soluble, 60-62% sulfonic content, non-ret. dms., c.l., works lb. .16½- .18¾
l.c.l. works lb. .17½- .19
tanks, works lb. .14½- .17
50-55% sulfonic content, non-ret, dms., c.l., works lb. .16 - —
l.c.l., works lb. .17 - —
tanks, works lb. .13 - —
o-Phenetidine, dms., t.l., frt. alld. E lb. .91 - —
l.c.l., same basis lb. .93 - —
p-Phenetidine, dms., c.l., frt. alld. lb. 1.00 - —
l.c.l., same basis lb. 1.03 - —
Phenobarbitol, USP, dms., 100-lb. lots lb. 3.25 - 3.75
Phenobarbital-sodium, USP, dms., 100-lb. lots lb. 3.25 - 3.75
Phenol, 90-92% (cresol 8-10%), non-ret. dms. c.l. frt alld E. of Rockies lb. .17¾- .18
l.c.l., same basis lb. .18¼- .19
tanks, same basis lb. .16 - —
82-84% (cresol 16-18%), non-ret. dms., c.l., same basis lb. .17½- —
l.c.l., same basis lb. .18½- —
tanks, same basis lb. .15½- —
39°C or above, tar distilled, non-ret. dms., c.l., same basis, lb. .19¼- .19⅛
l.c.l., same basis lb. .19¾- .20⅛
tanks, same basis lb. .17½- —
USP, syn., dms. c.l., t.l., frt. alld lb. .20 - —
l.c.l., same basis lb. .22 - —
tanks, same basis lb. .18 - —
Phenolphthalein, USP or yellow, bbls., dms., 2,000-lb. lots. lb. 1.15 - —
smaller lots ..... lb. 1.17 - 1.22
Phenothiazine, NF, fib. dms., c.l., frt. adjusted lb. .39 - —
over 2,100 lbs., same basis lb. .41 - —
less than 2,100 lbs., same basis. lb. .43 - —
Phenyl acetate, dms., 100-lb. lots, works lb. .50 - —
Salicylate (see Salol.)
Phenylacetaldehyde, soln., 50%, bots lb. 2.40 - 2.70
100%, bots ..... lb. 4.00 - 4.65
dl-Phenylalanine, dms., works lb. 27.00 - 37.50
1-Phenyl-3-carbethoxy pyrazolone-5, 250-lb. fib. drms., dlvd. E lb. 3.60 - —
smaller dms., dlvd. E lb. 4.00 - —
N-Phenyldiethanolamine, dms., c.l., dlvd. E lb. .40½- —
l.c.l., dlvd. E lb. .41½- —
tanks, dlvd. E lb. .38½- —
m-Phenylenediamine, dms. frt. alld. lb. 95 - —
o-Phenylenediamine, comi., 100 to 1,000 lbs., fib. dms., works lb. 1.70 - 1.80
p-Phenylenediamine, refd., tech., dms., works lb. 1.42 - —
Phenylethanolamine, dms., c.l., works lb. .75½- —
l.c.l., same basis lb. .76 - —
Phenylethyl acetate, bots ..... lb. 1.25 - 1.60
Phenylhydrazine base, CP, bots lb. 3.00 - 3.07
Hydrochloride, comi., kgs., works, lb. 1.75 - —
purif., bots., works ..... lb. 5.17 - —
1-Phenyl-3-methyl pyrazolone-5, 250-lb. lots, dlvd. E lb. 1.80 - —
smaller lots, dlivd. E ..... lb. 2.10 - —
Phenylethylphenyl acetate, bots lb. 4.15 - 4.35
o-Phenylphenol, dms., l.c.l., works. lb. .42 - .44
p-Phenylphenol, bgs., c.l., works lb. .37 - —
l.c.l., works ..... lb. .41½- —
Phloroglucinol, comi., fib. dms., works lb. 6.40 - —
C.P., bots., works ..... lb. 17.75 - —
tech., fib. drums., works ..... lb. 10.45 - —
Phosphate, defluorinated (see under D).
Rock, Curacao, Atlantic ports, New Orleans ton. 48.00 - —
Florida, land pebble, run-of-mine, washed, dried unground, bulk, c.l., mines, 68-66%, b.p.l., bulk, c.l., mines ..long-ton. 4.94 - 4.99
70-68%, b.p.l., c.l., same basis ..long-ton. 5.34 - 5.39
72-70%, b.p.l., c.l., same basis ..long-ton. 5.99 - —
75-74%, b.p.l., c.l., same basis ..long-ton. 6.99 - —
78-76%, b.p.l., c.l., same basis ..long-ton. 7.99 - —
The Florida prices (above) are based on fuel oil at $2.47 per bbl. and labor at $1.43. Recent oil advance currently absorbed.
Phosphorus, amorph., red, dms., t.l., works lb. .48 - —
smaller lots, works ..... lb. .49 - .50
white (yellow), solid, dms., c.l., works, frt. equald lb. .20 - .20½
l.c.l., works, frt. equald. lb. .21½- —
tanks, works, frt. equald. lb. .19 - —
Oxychloride, dms., c.l., works lb. .14 - —
l.c.l., works ..... lb. .15 - —
tanks, works ..... lb. .12½- —
Pentasulfide, solid, dms., c.l., works lb. .11½- —
l.c.l., works ..... lb. .12½- —
Pentoxide, dms., c.l., works lb. .13½- —
l.c.l., works ..... lb. .16½- —
Sesquisulfide, tins, cs., c.l., works. lb. .38 - —
l.c.l., works ..... lb. .39 - .40



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High-Quality Aromatic Solvents covering the full range of industrial needs

Esso
PETROLEUM SOLVENTS

Phosphorus trichloride, dms., c.l., works lb. .14 - —
Trichloride, dms., c.l., works lb. .14 - —
l.c.l., works lb. .15 - —
tankcars, works lb. .12½ - —
Phthalic anhydride, bgs., c.l., works, frt. equald lb. .21 - —
l.c.l., same basis lb. .22 - —
tanks, same basis lb. .20½ - —
Phthalimide, 97%-98%, dms., frt. equald lb. .65 - —
Phthalylsulfacetamide, 1,000-lb. lots or more lb. 5.00 - —
NF lb. 5.20 - —
a-Picoline, ret. dms., c.l., works, frt. equald lb. .43 - .43½
l.c.l., works, frt. equald lb. .44 - —
tanks, same basis lb. .415 - .422
b,g-Picoline 5°C. dms. c.l., works. lb. .32½ - —
l.c.l. works lb. 33 - —
g-Picoline 98%, dms., works lb. 2.00 - —
Pilocarpine hydrochloride USP, bots oz 4.75 - 5.25
Nitrate, USP, bots. vials oz 4.65 - 4.75
Pimento, Jamaican, bgs lb. .72 - —
Mexican, bgs lb. .45 - —
Pink root, bls lb. 2.50 - —
Piperazine, crude, dms., c.l., works, lb. 3.15 - —
l.c.l., works lb. 3.30 - —
Hexahydrate, French Codex, bots, kilo. 8.00 - 8.50
Piperidine dist. dms. frt equald lb 2.60 2.70
Piperonyl butoxide, dms. dlvd E lb 4.50 5.05
Pitch, coaltar, bulk, aluminum, works ton.40.00 -42.00
carbon and industrial, works, ton.40.00 - —
core, works ton.36.50 - —
fiber, works ton.44.00 - —
Roofing, 140-155°F., Fed. Spec. RP-381, Type I, tanks, works ton.39.00 - —
Cottonseed raw, dms. works lb. .03 - .03¼
tanks, same basis lb. .02¾ - —
Linseed, dms lb. .06 - .06¾
Marine, dms lb. .04¼ - .05
Petroleum (see Asphalt, petroleum).
Soybean, dms., works lb. .05 - .05½
Tall, dms., c.l., works ton.50.00 -70.00
tanks, works ton.30.00 -40.00
Plaster of Paris (see Gypsum).
Platinum metal, works oz.105.00 -107.00
Pleurisy root, bls lb. .45 .50
Podophyllum resin, NF, dms lb.15.60 -16.10
Poke root, bls lb. .19 .22
Polymyxin, bulk, bots. dms, 50 billion units or more, 1,000,000 units, .52 - —
25-50 billion units 1,000,000 units, .54 - —
1-25 billion units 1,000,000 units, .56 - —
Polyoxyethylene sorbitan monostearate dms 20,000-lb lots, works lb. .41 - —
10,000-20,000-lb lots works, lb. .43 - —
smaller lots works lb. .46 - .48
Tristearate, dms., 20,000-lb. lots, works lb. .41 - —
10,000-20,000 lb lots, works, lb. .43 - —
smaller lots works lb. .46 - .48
Poppy seed, Argentine, bgs lb. .24 - —
Dutch, bgs lb. .28½ - —
Iranian, bgs lb. .14½ - .15
Polish, bgs lb. .28 - —
Turkish, bgs lb. No prices.
Potash caustic reg. flake, 88-92%, dms., c.l., works 100 lbs. 9.15 - —
l.c.l., works 100 lbs.10.20 - —
liq., 45% basis, dms., c.l., works 100 lbs. 4.25 - —
l.c.l., same basis 100 lbs 5.05 - —
tanks, same basis 100 lbs 3.70 - —
solid, 88-92%, dms., c.l., works, 100 lbs. 8.70 - —
l.c.l., works 100 lbs. 9.75 - —
Potassium acetate, NF dms lb. .31 - .38
Bicarbonate, USP, gran., dms lb. .22 - —
powd. dms lb. .24 - —
Bichromate, gran., bgs., c.l., t.l., works lb. .18 - —
l.c.l., works lb. .18½ - .19¾
Potassium bichromate in dms. ½c. higher.
Bitartrate, NF, dom., gran. or powd., bols. 5,000 lbs., 1 ship't lb. .40½ - —
dms., c.l. lb. .40 - —
smaller lots lb. .41 - .43
imp., kgs. lb. .32 - .35
Bromate dms. 1,000 lbs or more, lb. .50 - —
25-200 lb to lb. .52 - .62
Bromide, USP, gran., bbls., kgs. lb. .37 - .38
Carbonate, NF gram, bbls., dms. lb. .20 - —
powd., bbls. dms lb. .21 - .22
tech. calcined, bbls. c.l., works. 100 lbs. 9.00 - —
l.c.l. same basis 100 lbs 10.05 - —
hydrated, 83-85%, bbls., c.l., works 100 lbs. 7.60 - —
l.c.l., works 100 lbs. 8.65 - —
Chlorate cryst. dms., c.l., works. lb. .11¼ - —
l.c.l., works lb. .11½ - .12½
powd., dms., c.l., works lb. .11¾ - —
l.c.l., works lb. .12 - .13
NF, gran., 25-lb. metal dms lb. .36 - —
Chloride, agricultural (see Potassium muriate).
indust. 99.9% KCl, bulk, c.l., works ton.29.00 - —
bgs., c.l., works ton.33.50 - —
99.3% KCl, bulk, c.l., works ton.27.00 - —
bgs., c.l., works ton.31.50 - —
USP, cryst., dms lb. .21 - .23
gran., dms lb. .15 - .17
powd. dms lb. .24 - .26
Chromate, tech., bgs. lb. .50 - .50½
Citrate, USP, gran., dms lb. .43 - —
powd. dms lb. .40½ - .41½
Cyanide dms. 20,000-lb. lots or more works lb. .45 - —
2,000-19,999-lb lots, works lb. .455 - —
smaller lots, works lb. .465 - —
Dichromate (see Potassium bichromate).
Ferrocyanide, bgs., ton lots lb. .23 - —
smaller lots lb. .23½ - —
smaller lots lb. .23 - —
Fluoborate fib dms, c.l., works lb. .30 - —
l.c.l., works lb. .31 - —
Fluoride, dms., works lb. .37 - .38
Gluconate, dms. lb. 1.60 - —
Guaiacolsulfonate, NF, dms lb. 2.10 - 2.30
Hydroxide, tech. (see Potash caustic).
USP, pellets 100-lb. dms, 1 to 100-dm. lots lb. .28½ - .33
Hypophosphite, NF, fib. dms., ton lots or less lb. 1.00 - 1.03
Iodide, dms lb 1.90 - 1.95
Metabisulfite, gran., dms. lb. .20 - .21
powd., dms lb. .25 - —
Muriate, standard and granular, 59-63% K_2O, bulk, c.l., works, base price unit-ton. .36 - —
July forward unit-ton. .38 - —
granular, 60-63% K_2O, bgs., c.l., works, base price ton.26.25 - —
July forward ton.27.45 - —

Potassium nitrate, cryst., bbls., 20-ton lots 100 lbs.14.40 - —
smaller lots 100 lbs.14.65 -14.90
gran., bbls., 20-ton lots 100 lbs. 9.75 - —
smaller lots 100 lbs.11.10 -11.50
powd., bbls., 20-ton lots 100 lbs.10.75 - —
smaller lots 100 lbs.12.00 -12.50
USP, gran., dms. lb. .18 - —
Potassium nitrate in bags 50c. per 100 lbs less in kegs $1 more
Oxalate, neutral, tech., fine gran., bbls., dms lb. .30 - .31
Pentaborate, gran., bgs., c.l., works. ton.191.50 - —
dms., ton lots, ex whse ton 198.00 - —
smaller lots, ex whse ton 302.50 - —
Powdered potassium pentaborate $10.25 per ton higher
Perchlorate, dms., c.l., works lb. .18½ - —
l.c.l., works lb. .19 20
Permanganate, coml., kgs., works, lb. .24½ - 27½
USP, dms., works lb. .27¼ - .29
Persulfate, bbls., c.l., works lb. .16½ - —
dms., 5-ton lots, works lb. .18 - —
1-ton lots, works lb. .20 - —
Pyrophosphate, tetrabasic, dms., works lb. .15½ - .18½
Prussiate red (see Potassium Ferricyanide).
yellow (see Potassium Ferrocyanide).
Silicate, glass bgs., c.l., works. 100 lbs.17.00 -17.30
l.c.l., works 100 lbs.17.80 - —
soln., clarif., 29° Be, 1:2.5, dms., c.l., works 100 lbs. 5.80 - —
l.c.l., 5 dms. or more works 100-lbs. 6.55 - 6.95
tanks, works 100-lbs. 5.45 - —

Potassium silicate, electrical grade, 29° Be, 1:2.0, dms., c.l., works, 100 lbs. 6.50 - —
l.c.l., 5 dms. or more, works 100 lbs. 7.25 - 7.65
tanks, works 100 lbs. 6.15 - —
40.5° Be, 1:2.1, dms., c.l., works 100 lbs. 6.45 - —
l.c.l., 5 dms. or more works 100 lbs. 7.20 - 7.60
tanks, works 100 lbs. 6.10 - —
Silicofluoride bgs., works lb. .09½ - .10
tanks, works 100 lbs. 6.10 - —
Potassium silicofluoride in drums, 0.4c per lb higher
Stannate, dms., frt. alld. E lb. .723 - .791
Sulfate agricultural, 50% K_2O, bulk, works, base price, unit-ton. .64 - —
July forward unit-ton. .67 - —
NF VII, cryst., dms lb. .31 - .33
gran., dms. lb. .18½ - —
powder dms. lb. .16½ - .17
Sulfocyanate, NF, cryst., (see Potassium thiocyanate).
5-ton lots, works lb. .14½ - —
1-ton lot or less, works lb. .14¾ - —
Thiocyanate, NF, cryst., dms lb. .84 - .94
tech., works lb. .77 - .79
Titanate, ctns., c.l., works lb. .14 - —
Toluene sulfonate, dms., c.l., or t.l., works lb. .42 - —
l.c.l., works lb. .46 - —
Potassium-magnesium sulfate, bulk, works, basis 40% K_2SO_4, 18% MgO base price ton.13.45 - —
July forward ton.14.00 - —

Potassium-sodium tartrate, NF, gran. powd., dms., c.l. lb. .42½ - —
5,000-lb. lots lb. .43 - —
smaller lots lb. .43½ - .45
Potassium-titanium fluoride, fib. dms, works lb. .39 .40
Potassium-zirconium fluoride, fib. dms, c.l., works lb. .50 - —
l.c.l., works lb. .52½ .55
Pregnenolone, bots. gram. .45 - —
Acetate, bots. gram. .40 - —
Procaine hydrochloride, USP, dms., 1,000-lb. lots, frt. alld lb. 2.83 - —
100-500-lb. lots lb. 2.95 3.15
Progesterone, USP bots., 100 gram lots gram .50 - —
Acetate, bots. gram .70 - —
Propane, indust. tanks, group 3 gal. .05 - —
N. Y. Harbor gal. .093 - —
n-Propyl acetate, dms., c.l., dlvd. lb. .13¼ - —
l.c.l., dlvd lb. .14¼ - —
tanks, dlvd lb. .11¼ - —
Gallate, dms., 100 to 2,000-lb. lots, works lb. 3.90 4.40
p-Hydroxybenzoate, USP, dms lb. 2.30 2.40
Propyl thiouracil, bots., 50-kilo lots or more kilo.55.00 —
smaller lots kilo.55.10 -55.30
Propy thiouracil prices in West 1c. higher dlvd., on same basis.
Propylene dichloride, dms., c.l., dlvd. E lb. .09½ - —
l.c.l., same basis lb. .10½ - —
tanks, same basis lb .07 - —

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Mine and Refinery at Carlsbad, New Mexico • Chemical Manufacturing Plant at Niagara Falls, New York

Propylene glycol, indust., dms., c.l., dlvd. E lb. .16 • —
l.c.l., same basis lb. .17 • —
tanks, same basis lb. .13½ • —
USP, dms., c.l., dlvd. E lb. .18 • —
l.c.l., same basis lb. .19 • —
tanks, same basis lb. .15½ • —
Methyl ether dms., c.l., dlvd lb. .20 • —
l.c.l. same basis lb. .21 • —
tanks, same basis lb. .18½ • —
Oxide, dms., c.l., dlvd. E lb. .17½ • —
l.c.l. dlvd E lb. .18½ • —
tanks dlvd E lb. .15½ • —
Psyllium seed, black, bgs lb. .28 • .30
blonde, bgs lb. .18 • —
husks, bgs lb. .40 • —
Pumice dom., grd., coarse to fine, 0, ½, 1, 1½, 2, 3, bgs., ton lots lb. .03⅝ .04¼
smaller lots lb. .03⅞ .04½
imp., Italian, silk-screen, coarse, bgs., ton lots lb. .06½ • —
fine, bgs, ton lots lb .04 • —
sun dried, coarse, bgs ton 58.00 • —
Pumpkin seed, bgs lb. .25 • .26
Pyrethrin, syn. (see Allethrin).
Pyrethrum flowers, fine grd., 0.9% pyrethrins, bbls, works lb. .45 • —
powd., 1.3% pyrethrins, obls., works lb. .65 • —
liq. 20/1 basis (2 grams pyrethrins per 100cc odorless base), 100/1 basis (10 grams pyrethrine per 100cc odorless base) dms., works gal. 41.75 -42.75
oleoresin dewaxed, 20% dms. works lb 10.00 —
purif. 20% dms., works lb 10.00 -10.10

Pyridine, denaturing, dms., c.l., works and frt. equald gal. 2.77 • —
l.c.l., same basis gal. 2.80 • —
refd., 2°, non-ret. dms., l.c.l., same basis lb. .75 • —
Pyridoxine hydrochloride, bots., 100-gram lots gram .37½ • —
Pyrites, Canadian, works long-ton 3.00 • 5.00
Pyrocatechol (see Catechol).
Pyrogallol, NF dms lb. 3.27 • 3.30
Pyroxylin scrap, ungrd., amber, dms., works lb. .20 • —
black, dms., works lb. .12 • —
mixed mottled dms. works lb. .13 • —
shavings, amber, cs., works lb. No stocks.
mixed colors, dms., works lb. .11 —
white, china, ivory, dms., works lb. .16 • —
dense, opaque, dms., works, lb. .12 • .15
translucent pastels, cs., works. lb. .14 • —
colors, dms., works lb. .16 • —
USP bots lb. 9.50 • —

Q

Quassia chips lb. .17 • —
Quebracho extract, clarif., grd., 70% tannin, bgs., c.l., lb. .16½ .16¾
liq., 35% tannin, bbls, works, lb. .08¼ .08½
solid, clarif., 64% tannin, bgs., c.l., ex-dock, duty extra lb. .12 23/64
ord., 63% tannin, bgs., c.l., same basis lb. .11 21/32 —

Quercitron extract, cryst., No. 1, bbls., l.c.l. lb. .40 • —
liq., No. 1, bbls., l.c.l. lb. .19 • —
Quicksilver (see Mercury metal).
Quince seed, bgs lb. 2.00 Nom.
Quinidine sulfate, USP, cns., 100-oz. lots oz. .73 • .75
Quinine, NF, cns., 100-oz. lots oz. .54 • —
Bisulfate, USP, cns., 100-oz. lots, oz. .37½ • —
Hydrochloride, cns., 100-oz. lots oz. .35 • .47½
Sulfate, USP, cns., 100-oz. lots oz. .29 • .35
Quinoline dms., c.l., frt. equald lbs. .50¾ • —
l.c.l., same basis lb. .51¼ • —
tanks, same basis lb. .50 • —

R

R salt, paste, dms., frt. alld, 100% basis lb .88 • —
powd., frt. alld., 100% basis lb. .98 • —
Rauwolfia serpentina root, powd., bbls., dms lb. 1.75 • —
Red, BON acid maroons, pure, bbls., lb. 1.75 • —
resinated, bbls lb. 1.50 • —
arylid, deep shades, bbls lb. 3.60 • —
light shades, bbls lb. 2.75 • —
maroon, bbls lb. 3.60 • 5.90
Cadmium, CP, dark shade, bbls., frt. alld. E. of Rockies lb. 4.30 • —
light shade, bbls., same basis. lb. 4.00 • —
medium shade, bbls., same basis lb. 4.25 • —
medium light shade, bbls., same basis lb. 4.05 • —
Red, cadmium, CP, orange shade, bbls., same basis lb. 3.95 • —
orange red, bbls, same basis. lb. 1.81 • —
Red, cadmium selenide, lithopone, maroon shade, bbls., same basis. lb. 3.77 • —
dark, bbls., same basis. lb. 3.90 • —
red shade, dark, bbls., same basis lb. 3.44 • —
light, bbls., same basis. lb. 2.24 • 2.32
medium, bbls., same basis lb. 2.99 • —
medium light, bbls., same basis lb. 2.49 • —
Mercury lithopone, dark shade, bbls., same basis lb. 2.40 • —
light shade, bbls., same basis. lb. 1.95 • —
medium shade, bbls., same basis lb. 2.25 • —
medium light shade, bbls., same basis lb. 2.10 • —
Carmine No. 40 (see Carmine).
Dyes (see Dyes, coaltar)
Eosin toner, bbls., works lb. 1.65 • —
Indian, dom., pure, bgs., Bethlehem, Easton, E. St. Louis, N. Y lb. .12¾ • —
Iron oxide, nat., 75-85% ferric oxide, bgs., l.c.l., Bethlehem, Pa., Copley, O., Easton, Pa., bgs., c.l., works lb. .0675 • —
Lake C toner, alizarine, bbls., works lb. 1.13 • —
rubine toner, pure, bbls, works, lb. 1.50 • —
resinated, bbls., works lb. 1.40 • —
Virginia type, bbls., works lb. 1.40 • —
Maroon toner, MNPT, kgs., c.l., works lb. 3.60 • —
10,000-lb. lots, works lb. 4.22 • —
smaller lots, works lb. 4.24 • —
Mercury oxide, tech., c.l., works, lb. 5.77 • —
Metallic, bbls., c.l., works lb. 02½ • —
l.c.l., works lb 02¾ • —
Naphthol, ITR, bbls., works lb. 5.25 • —
Oxide (see Red iron oxide).
Persian Gulf, bgs., c.l., works, lb. .07¾ • —
l.c.l., works lb. 08 • —
Para toner, bbls lb. 1.10 • —
chlorinated, kgs lb 1.10 1.15
Phloxin toner (see Red eosin toner)
Rhodamine, molybdated, PMA, kegs lb. 5.35 5.60
tungstated, PTMA, works, kegs, lb. 6.40 —
Spanish oxide, bbls., c.l., ex-dock, lb. .05¾ • —
l.c.l., ex dock lb. .06 • —
ex whse., New York lb. .06½ • —
Toluidine toner, deep shades, kgs., works lb. 1.62 • 1.65
light shades, kgs, works lb 1.62 1.65
Turkey, bbls., works lb. .62 • —
Tuscan, bbls., frt. equald lb. .26 .32
Venetian, jobbing, bgs., works lb. .0475 • —
lb. .0475 • —
20%, bgs., works lb. .0525 • —
25%, bgs., works lb. .0575 • —
30% bgs., works lb. .06 • —
35%, bgs., works lb. .0625 • —
40%, bgs., works lb .0675 • —
Watchung-type bbls m 1.95
Red KB base (see 4-Chloro-2-aminotoluene).
Red, precipitate (see Mercuric oxide, red)
Red saunders, NF, powd., bbls lb. .35 .40
Reserpine, cryst., bots gram. 3.75 • —
Resorcinol, tech. grade, dms., c.l., works, frt equald lb. 77½ • —
l.c.l., same basis lb. 78½ • —
USP, dms., works lb 2.75 • —
powd., dms., works lb 2.95 • —
Monoacetate, NF dms lb 3.00 3.25
Rhatany root, bgs lb 15 16
Rhodinol, 5-lb. cans lb. 32.00 -36.00
Rhubarb root, India, whole, bgs. lb. .30 • —
powd., bbls lb. .38 • —
Riboflavin USP, bots., dlvd kilo 65.00 • —
readily soluble, bots., dlvd kilo 130.00 • —
5'-phosphate-sodium, bots., 100-kilo lots or more kilo 125.00 • —
Rochelle salt (see Potassium sodium tartrate).
Roofing pitch (see Pitch, coaltar, roofing)
Rosin gum and wood (see Naval Stores in Protective Coatings market).
Rotenone, fib, dms., works, unit-lb. .12 • —
resin, 25-45%, fib dms., works, unit-lb. .12 • —
Rottenstone, bgs., 5-ton lots ex-whse lb. .03¾ • —
ton lots, same basis lb. .04¼ • —
Rutin, NF, fib, dms., 25-kilo lots, kilo 17.50 -18.50
10 to 25-kilo lots kilo 17.50 -20.00
1 to 10-kilo lots kilo 18.90 -20.00
Ryania, 100% powd. bgs., c.l., works lb. .22 • —
l.c.l., same basis lb. .24 • —

S

Sabadilla seed, powd., bbls lb. .49 • .49½
activated, ground with lime, bbls. lb. .30 • .32
Saccharin USP cryst., soluble, dms., 1000-lb. lots lb. 1.60 • —
smaller lots lb. 1.70 • 1.80
powd., soluble, insoluble, dms., 1,000-lb. lots lb. 1.65 • —
smaller lots lb. 1.75 • 1.95
Calcium, fib dms. 1,000-lb. lots, works lb 2.50 • —
Saffron, Spanish, USP tins lb 45.00 • —
Safrol, dms lb. .90 • 1.05
Sage, Cretan, bgs lb. .11 • —
Dalmatian, bgs. lb. .44 • —
Italian lb. 25 Nom.
Sago flour, raw, bgs lb. .07 .07¼
refd. bgs lb. .08½ .09
Sal soda (see Soda sal).
Salicylamide, 100-lb. dms lb. 1.25 • —
Salol, NF, gran., bbls., kgs lb 1.15 • —
Powdered salol, 25c higher
Salt, rock, paper bgs., c.l 100 lbs. 1.03½ • —
table, vacuum, common fine, paper bgs., c.l 100 lbs. 1.27½ • —
Saltcake, dom., bulk works, 100% Na_2SO_4 basis ton 28.00 • —
Saltpeter (see Potassium nitrate).
Sandalwood, East Indies chips bgs. .65 • .66
powd., fib, dms lb .75 • .76
Schaeffer's salt, paste, dms, frt. alld. 100% basis lb .95 • —
powd bgs, frt alld, 100% basis, lb. .95 • —
Scopolamine hydrobromide, USP bots oz. 13.50 -16.50
Seidlitz mixture, bbls. 5,000-lb. lots lb. 30½ • —
smaller lots lb. .31 .32
Selenium, powd., 99½%, dms., dlvd, lb. 13.50 -15.50
Senega root, bls lb. 2.75 • —
Senna leaves, Alex, whole and half, bls lb. .19 • —
siftings lb. .17 • —
Tinnevelly, No. 1, bls lb. .16 • .18
No. 2 bls. lb .13 • .15
No. 3, bls. lb. .11 • .13
powdered, bbls., bxs lb. .15 • —
pods bls. lb .14 • —
Serpentaria, root, bls lb 5.50 • —

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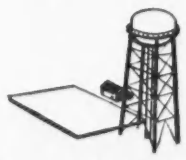
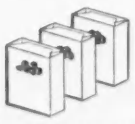


WATER TREATMENT – as an antichlor



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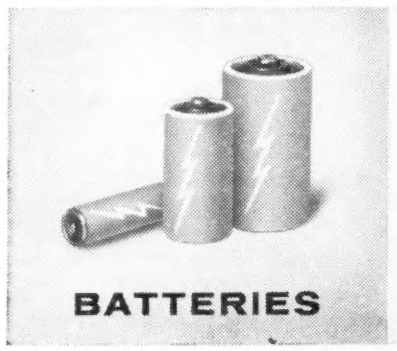
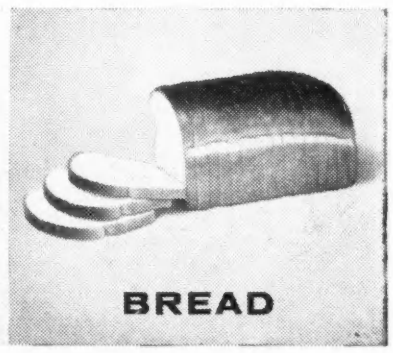
PHOTOGRAPHY—for fixing solutions

Sesame seed, Egyptian, hulled, bgs.	lb.	.21½	—
nat., bgs.	lb.	.17	—
Nicaragua, hulled, shipt., bgs.	lb.	.25	—
nat., bgs.	lb.	.16½	—
Salvadorian, natural, bgs.	lb.	.18½	—
Indian, natural, bgs.	lb.	N.P.	
Shellac, bleached, bonedry, bgs., 2,500-lb. lots	lb.	.56	—
bbls., 1,500-lb. lots	lb.	.57	—
kgs., 1,500-lb. lots	lb.	.58	—
refd., bgs., 1,500-lb. lots	lb.	.66	—
bbls., 1,500-lb. lots	lb.	.67	—
kgs., 1,500-lb. lots	lb.	.68	—
Bonedry shellac prices for less than 1,500 lb. lots 1c. per lb. higher for all packages.			
Lemon, No. 1, bgs., 10-bg. lots	lb.	.48	—
No. 2, bgs., 10-bg. lots	lb.	.45	—
Superfine, bgs., 10-bg. lots	lb.	.43	—
Shellac in 1 to 10-pg. lots 1c. per lb. more.			
Shingle stain oil (see Oil shingle stain)			
Silica, amorph., dry-grd., 325 mesh, bgs., c.l., works	ton	25.00	—
t.c.l., works, exwnse	ton	45.00	-55.00
hard-quartz, 99½%, 325 mesh, bgs., c.l., works	ton	20.00	—
t.c.l., works	ton	25.00	-30.00
140 mesh bgs. c.l., works	ton	15.00	—
t.c.l. works	ton	20.00	—
Silicon tetrachloride, tech., dms., c.l., works	lb.	.18	—
t.c.l., works	lb.	.22	.30½
tanks, works	lb.	.17	—
Silver bullion, ingots, cs.	Troy oz.	.91⅜	—
Cyanide fib dms., 2,500-oz. lots.	oz.	.87	—
1,000-oz. lots	oz.	.87⅜	—
500-oz. lots	oz.	.87½	—
100-oz. lots	oz.	.87¾	—
Nitrate, CP. crvst., bots., 2,500-oz. lots	oz.	.62¼	—
1,000-oz. lots	oz.	.63¼	—
500-oz. lots	oz.	.64	—
250-oz. lots	oz.	.64½	—
USP granular silver nitrate 4c. per oz higher.			
Proteinate mild USP, bots., dms., 1,000-oz. lots	oz.	1.05	—
strong NF bots dms. 1,000 oz. lots	oz.	1.00	—
Soapbark, whole, bls	lb.	.38	.40
crushed bls. bbls	lb.	.45	—
powd. bbls	lb.	.45	—
Soda ash, dense, 58%, paper bgs., c.l., works	100 lbs.	1.90	—
t.c.l., stock points	100 lbs.	3.00	4.77
bulk, c.l., works	100 lbs.	1.60	—
light, 58%, paper bgs., c.l., works	100 lbs.	1.85	—
t.c.l., stock points	100 lbs.	3.95	4.72
bulk, c.l., works	100 lbs.	1.55	—
Soda, caustic, flake, 76% dms., c.l., works, frt. equald	100 lbs.	4.70	—
t.c.l., stock points	100 lbs.	5.80	—
liq., 50%, sellers tanks, works, dry basis	100 lbs.	2.90	—
rayon type, sellers, tanks, works, dry basis	100 lbs.	2.90	3.00
73%, sellers' tanks, works, dry basis	100 lbs.	3.00	—
rayon-type, sellers' tanks, works, dry basis	100 lbs.	3.00	3.10
solid, 76%, dms. c.l., works,	100 lbs.	4.30	—
t.c.l., stock points	100 lbs.	5.50	—
Sal. conc., bgs., c.l., works.	100 lbs.	2.50	—
smaller lots, works	100 lbs.	2.80	—
Sodium acetate anhyd. ogs., c.l., works	lb.	.13	—
dms., c.l., works	lb.	.13¾	—
NF 60% gran dms., c.l., works	lb.	.14	—
t.c.l. works	lb.	.15½	—
Alginate, NF white powd., dms., ton lots, works	lb.	.87	1.30
p-Aminobenzoate, dms., 1,000-lb. lots or more	lb.	2.25	—
smaller lots	lb.	2.35	2.45
p-Aminosalicylate, dms., 100 lbs. or more, frt. adjusted	lb.	2.70	—
Antimoniate, bbls. c.l., dlvd. E.	lb.	.28	—
t.c.l., dlvd. E	lb.	.29½	—
Arsenate, 45% arsenic pentoxide, dms., c.l., works	lb.	.12½	—
t.c.l., works	lb.	.13¾	.14½
Arsenite 90%, pink powder, 75% arsenious oxide, dms., works	lb.	.12¼	—
t.c.l., works	lb.	.13	.14½
soln. dms. works	gal.	.59	.67
Ascorbate, dms., 25-50 kilo lots.	kilo.	12.00	—
10-kilo lots	kilo.	12.35	—
5-kilo lots	kilo.	12.75	—
1-kilo lots	kilo.	13.00	—
bots., 500-gram lots	kilo.	13.50	—
Benzoate tech., bbls., dms., lots or more	lb.	.39	—
USP bbls., dms. 100-lb. lots. or more	lb.	.46	—
Bicarbonate, USP, gran., bgs., c.l., works	100 lbs.	2.95	—
t.c.l., works	100 lbs.	3.85	—
powd., bgs., c.l., works.	100 lbs.	2.55	—
t.c.l., works	100 lbs.	3.45	—
Bichromide, gran., bgs., c.l., t.l., works	lb.	.13	—
t.c.l., works	lb.	.13½	.14¾
Bifluoride, bbls., c.l., works, frt. equald	lb.	.19½	—
t.c.l., same basis	lb.	.1990	—
Bisulfate, bulk., c.l., works	100 lbs.	2.00	—
dms., c.l. frt. equald	100 lbs.	3.00	3.60
t.c.l. frt. equald	100 lbs.	3.50	4.10
Bisulfite, anhyd., bgs., c.l., works.	100 lbs.	5.00	—
t.c.l., works	100 lbs.	5.40	—
soln., 35° bbls. c.l., works.	100 lbs.	1.55	—
t.c.l. works	100 lbs.	2.05	—
Borate (see Borax)			
Bromide, USP, bbls., works	lb.	.38	—
Carboxymethyl cellulose (see CMC).			
Carbonate, cryst., monohydrated (see Soda, salt), monohydrated, bgs., c.l., works.	100 lbs.	3.10	—
t.c.l., works	100 lbs.	3.50	—
Chlorate, cryst. dms., c.l., works.	lb.	.09	—
t.c.l., works	lb.	.09½	.10½
Chloride, tech (see Salt).			
USP, bgs.	lb.	.05	.12
Chlorite, tech. dms., c.l., works.	lb.	.58	—
20-ton lots or more, works	lb.	.66	—
smaller lots, works	lb.	.70	.73
Chloroacetate, tech., dms., c.l., works	lb.	.27	—
t.c.l. works	lb.	.28	—
Chromate, anhyd., fiber dms., c.l., t.l., works	lb.	.14¾	—
t.c.l., same basis	lb.	.15¼	.16½
tetrahydrate, bgs., c.l., t.l., works	lb.	.1015	—
t.c.l.	lb.	.1065	.1190
Citrate, anhyd., dms.	lb.	.62	—
NF VIII, gran., dms.	lb.	.26½	.27½
USP, XIV gran., dms.	lb.	.29½	.30½
Sodium citrate, USP, powd. higher	prices		½c
Cyanate, dms., 1,000-lb. lots, works	lb.	.85	1.10
smaller lots works	lb.	1.00	1.25
Cyanide flake, 96-98%, dms., c.l., or 20,000-lb. lots	lb.	.178	—
over 1,000-lb. lots	lb.	.188	—
100-lb. to 1,000-lb lots	lb.	.198	—
Granular sodium cyanide 1c. higher.			

Sodium diacetate, 33-35% acidity, 250-lb. dms., works	lb.	.15	—
t.c.l., works	lb.	.15¾	—
anhyd., dms., c.l., works	lb.	.18	—
t.c.l., works	lb.	.18¾	—
Ferrocyanide, bgs., 10-ton lots	lb.	.13½	—
smaller lots.	lb.	.14	—
Fluoride, white, 97%, fib. dms., c.l., works, frt. equald	lb.	.1390	—
t.c.l. works	lb.	.1430	—
Formate, bgs., c.l., works	100 lbs.	7.60	—
t.c.l., works	100 lbs.	8.65	—
Gentisate, 100-lb. fib. dms.	lb.	5.50	—
Gluconate, refd., dms.	lb.	.80	.83
tech, dms	lb.	.35	—
Glutamate, mono., dms., c.l.	lb.	1.20	—
Hydride, dms., works	lb.	1.80	3.00
Hydrosulfide (see Sodium sulfhydrate)			
Hydrosulfite dms., c.l. frt. alld.	lb.	.24	—
t.c.l., frt. alld.	lb.	.24½	—
Hydroxide, NF, pellets, 100-lb. dms., 1 to 100-dm. lots technical (see Soda, Caustic).	lb.	.18½	.23
Hydrophosphite, NF, dms., ton-lots or less	lb.	.95	.98
Hyposulfite, anhyd., tech., bgs., c.l., works	100 lbs.	7.25	—
t.c.l., works	100 lbs.	7.65	—
photo grade, bgs., c.l., works.	100 lbs.	8.05	—
t.c.l., works	100 lbs.	8.45	—
Hexahydrate, pea cryst., bgs., c.l., works	100 lbs.	5.15	—
t.c.l., works	100 lbs.	5.55	—
photo grade, bgs., c.l., works.	100 lbs.	7.75	—
t.c.l., works	100 lbs.	8.05	—
Pentahydrate, tech., bgs., c.l., works	100 lbs.	5.15	—
t.c.l., works	100 lbs.	5.55	—
Sodium iodide, USP, bots., dms	lb.	2.55	- 2.62
Lactate, edible, 50%, cbys., dms., works	lb.	.21½	—
60% cbys. dms. works	lb.	.26½	—
tech., 50%, cbys., dms. works	lb.	.16½	—
Lauryl sulfate, dms., c.l., dlvd.	lb.	.19	—
t.c.l., dlvd.	lb.	.20	—
tanks, dlvd.	lb.	.18	—
Metabisulfite (see Sodium bisulfite).			
Metaborate octahydrate gran., bgs., c.l., works	ton	85.00	—
ton lots, ex whse	ton	137.50	—
smaller lots, ex whse.	ton	142.50	—
Tetrahydrate, dms., c.l., works.	ton	204.00	—
ton lots, ex whse	ton	242.50	—
smaller lots, ex whse.	ton	247.50	—
Metallic bricks, 14,000-lb. lots or more, works	lb.	.19½	—
fused, 14,000-lb. lots, works.	lb.	.19	—
tanks, works	lb.	.16	—
Metanilate, bbls., frt. alld.	lb.	.62	—
Metasilicate, anhyd., bgs., c.l., works	100 lbs.	5.70	—
t.c.l., works	100 lbs.	6.15	- 8.10
dms., c.l.	100 lbs.	6.20	—
t.c.l.	100 lbs.	6.65	- 8.55
Pentahydrate, bgs., c.l., works.	100 lbs.	4.45	—
t.c.l., works	100 lbs.	4.85	- 6.75
dms., c.l., works	100 lbs.	4.95	—
t.c.l., works	100 lbs.	5.35	- 7.25
Molybdate, anhyd., dms., works, frt. equald	lb.	.92	- .96
cryst., dms., works, frt. alld.	lb.	.73	- .74
Sodium monohydrate (see Sodium carbonate monohydrated).			
Naphthionate, bbls	lb.	70	—
Nitrate, crude, dom. bgs., c.l., works	ton	47.00	—
bulk c.l., works	ton	43.50	—
imp 100-lb. bgs., c.l., Atl. Gulf, Pac., whse	ton	49.50	—
bulk, c.l., same basis	ton	46.00	—
Nitrite, USP, bbls., c.l., works, frt. equald	100 lbs.	8.50	—
t.c.l., same basis	100 lbs.	10.50	—
Orthosilicate, conc., dms., c.l., works	100 lbs.	6.70	—
t.c.l., works	100 lbs.	7.05	- 7.65
hydrated, flake, bbls., c.l., works.	100 lbs.	5.65	—
t.c.l., works	100 lbs.	7.60	- 7.90
Oxalate, 88%, bgs., works	100 lbs.	10.85	—
Para-aminobenzoate (see Sodium p-Aminobenzoate).			
Para-aminosalicylate (see Sodium p-Aminosalicylate).			
Pentachlorophenate, briquets, bgs., c.l., works, frt. equald	lb.	.26	—
t.c.l. same basis	lb.	.27½	.34
pellets, bgs., c.l., same basis	lb.	.26	—
t.c.l., same basis	lb.	.27½	.34
Pentachlorophenate, powd., bgs., dms., c.l., same basis	lb.	.25	—
t.c.l., same basis	lb.	.26½	.33
Sodium pentachlorophenate, 20,000 lbs., min. truckloads, ¼c. per lb. over carlot prices.			





. . . a different job is done in each by

SOLVAY white AMMONIUM CHLORIDE

Will these properties help your process?

PHYSICAL AND CHEMICAL PROPERTIES

Molecular Weight: 53.50

Solubility in water: 20% at −13°C, 25% at 10°C 30% at 33°C, 40% at 83°C Strongly endothermic (lowers solution temperature upon dissolving) Aqueous solubility suppressed by sodium chloride. Slightly soluble in methyl and ethyl alcohol and acetone. Fair solubility in glycerine.

Melting Point: Sublimes.

pH of Solutions: 25°C: 1% 5.5, 3% 5.1, 10% 5.0 (technical grade).

Appearance: White crystals, practically 100% will pass through a No. 20 screen.

Reactions. Decomposed in solution by strong alkalies to liberate ammonia. Reacts with nitrites to form nitrogen. Reported to reduce oxides of cobalt and nickel at high temperatures. Hydroxides of nickel zinc cadmium and manganese reported to be more soluble in water in presence of ammonium chloride. Acid characteristics cause acceleration of set of urea-formaldehyde resins.

Quality Principal impurity is sodium chloride. Very low in metallic impurities. Technical grade better than 99% NH_4Cl.

SOLVAY ®

Aluminum Chloride • Chloroform
Vinyl Chloride • Calcium Chloride
Potassium Carbonate • Soda Ash
Sodium Nitrite • Snowflake® Crystals
Sodium Bicarbonate • Hydrogen Peroxide
Ammonium Chloride • Caustic Potash • Caustic Soda
Methylene Chloride • Monochlorobenzene • Chlorine
Ammonium Bicarbonate • Ortho-dichlorobenzene
Carbon Tetrachloride • Methyl Chloride • Cleaning Compounds • Para-dichlorobenzene

In batteries, it's a strong electrolyte. In bricks, it prevents "black-coring" by reacting with clay pyrites. In bread dough, it increases yeast action. SOLVAY Ammonium Chloride plays varied, vital parts in these, and many fields. In urea formaldehyde resins and adhesives, it speeds polymerization. On ski slopes, it slows melting. Other key uses are in textile and fur dyeing, compounding of "tanners bate" for leather, low-cost fireproofing of paper and textiles, flux for galvanizing and soldering, casting sealer for foundries.

MAIL COUPON TODAY

Allied Chemical

SOLVAY PROCESS DIVISION
ALLIED CHEMICAL & DYE CORPORATION
61 Broadway, New York 6, N. Y.

Gentlemen I am interested in the possible use of SOLVAY Ammonium Chloride in my operations. Please send me, without cost, samples and further information.

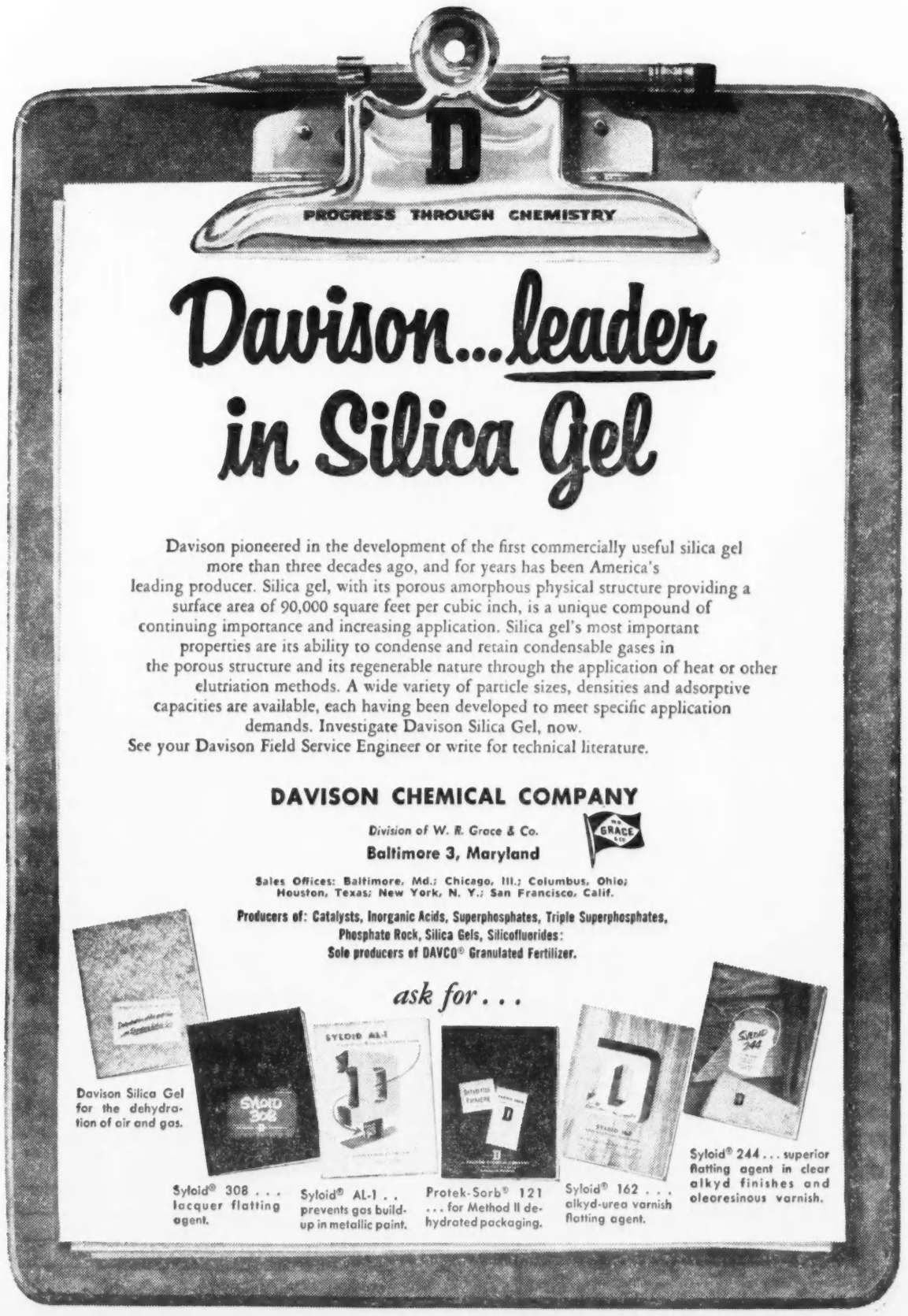
Name_____
Company_____
Position_____
Address_____
City_____ Zone_____ State_____ DU-11

Sodium perborate, NF, tech., bgs., c.l., works lb. .19 - —
l.c.l., works lb. .21 - —
Peroxide, dms., c.l., dlvd. E. of Miss lb. .20 - —
l.c.l. same basis lb. .20½- .21
Phenolsulfonate, USP IX, gran., dms lb. .44 - .45
Phosphate, dibasic, anhyd., bgs., c.l., frt. equald 100 lbs. 7.65 - —
l.c.l., works 100 lbs. 8.05 - —
USP dried powd. bgs., dms., works lb. .19 - .20½
monobasic anhyd., bgs., c.l., frt. equald 100 lbs. 8.70 - —
l.c.l., frt. equald 100 lbs. 9.10 - 9.70
duohydrate, bgs., c.l., frt. equald 100 lbs. 7.20 - —
l.c.l., frt. equald 100 lbs. 7.60 - 8.20
Phosphate, tribasic, anhyd., bgs., c.l., frt. equald 100 lbs. 8.00 - —
l.c.l., frt. equald 100 lbs. 9.05 - 9.65
cryst., bgs., c.l., t.l., frt. equald 100 lbs. 4.40 - —
l.c.l., frt. equald 100 lbs. 4.80 - 5.40
Sodium phosphates in dms., 60c. higher than bgs.
Prussiate, yellow (see sodium ferrocyanide).
Pyrophosphate, acid, bgs., c.l., works, frt. equald 100 lb. 10.85 - —
l.c.l., works 100 lbs. 11.60 -11.85

Sodium pyrophosphate, ferric, dms., c.l., t.l., works lb. .36 - —
l.c.l., works lb. .37 - .39
tetrabasic, anhyd., bgs., c.l., works, frt. equald 100 lbs. 7.52½ - —
l.c.l., frt. equald 100 lbs. 7.92½ - 8.52½
Salicylate, USP, dms lb. .74 - .76
Sesquicarbonate, bgs., c.l., works, 100 lbs. 2.35 - —
l.c.l., dlvd, zone 1 100 lbs. 4.10 - 4.35
zone 2 100 lbs. 4.35 - 4.60
zone 3 100 lbs. 4.75 - 4.90
zone 4 100 lbs. 5.35 - 5.60
Sales zones are: (1) Atl. States E. of Miss., R. and N. of south bound of Ky. and Va., Ala., La., and Miss., south of 31° Tex. E. of 100°; S. of 31° Fla.; also Me., N. H., and Vt., in which there are special county zones; Davenport, Ia., and St. Louis; (2) Ark. E. of 98° Ga.; Iowa (except Davenport), Minn., Mo. (except St. Louis), Neb. E. of 98° N. C., S. C., Tenn. and Tex. N. of 31° and E. of 100° (except Wichita Falls); also Ala., La. and Miss. No. of 31°; (3) Ark. W. of 96°, Kan., Neb. W. of 98°, N. D., Okla., S. D., Tex., W. of 100° (including Wichita Falls, excluding El Paso); (4) Ariz., Colo., Idaho, Mont., Nev., N. M., Utah, Wyo. and El Paso, Tex.
Sesquisilicate, hydrated, bgs., c.l., works 100 lbs. 5.00 - —
l.c.l., works 100 lbs. 5.35 - —
dms., c.l., works 100 lbs. 5.50 - —
l.c.l., works 100 lbs. 5.85 - —

Sodium silicate, liq., 40° Be, 1:3.2, turbid, dms., c.l., works 100 lbs. 1.45 - —
l.c.l., works 100 lbs. 1.80 - 2.30
tanks, works 100 lbs. 1.10 - —
47° Be, turbid, 1:2.9, dms., c.l., works 100 lbs. 2.10 - —
l.c.l., works 100 lbs. 2.70 - 2.95
tanks, works 100 lbs. 1.75 - —
52° Be, turbid 1:2.4, dms., c.l., works 100 lbs. 2.45 - —
l.c.l., works 100 lbs. 2.80 - 3.30
tanks, works 100 lbs. 2.10 - —
solid, 1:3.2, bgs, works ton 62.50 - —
Silicofluoride, bgs., c.l., works lb. .075 - —
l.c.l., works lb. .079 - —
Sodium silicofluoride in dms., 0.4c per lb higher
Stannate, dms., works, frt. alld. E lb. .620 - .674
Sulfa drugs (see Sulfa name)
Sulfanilate, bbls., works lb. .22 - —
Sulfate, NF, VII, dried, powd., dms lb. .22½- —
tech., anhyd., bgs., c.l., dlvd. E ton 52.00 - —
detergent, rayon grade, bgs., c.l., works ton 34.00 - —
bulk, c.l., works ton 31.00 - —
USP, cryst., fib dms lb. .17½- .18
gran., fib dms lb. .17½- .18
Sulfhydrate, flake, 70-72%, dms., c.l., works lb. .06¾- —
l.c.l., works lb. .07¾- —
liq. 40-44%, tanks, works, 100% basis ton 120.00 - —
Sulfide, flake, dms., c.l., works, E., frt. equald lb. .05½- —
l.c.l., same basis lb. .06½- —
fused, bbls., c.l., works E., frt. equald lb. .05 - —
l.c.l., same basis lb. .06 - —

Sodium sulfite, anhyd., bgs., c.l. 100 lbs. 3.25 - —
l.c.l., same basis 100 lbs. 3.75 - —
Sulfocyanide, CP (see Sodium thiocyanate).
Tetraborate (see Borax)
Tetrasulfide, liq., 40%, dms., c.l., c.l., works lb. .04 - —
l.c.l., works lb. .05 - —
Thiocyanate CP, dms lb. .55 - .65
tech., anhyd., dms., 1 ton lots or more, works lb. .317 - —
less than ton lots, works lb. .337 - —
Thiosulfate, NF, cryst., bbls lb. .13½- —
tech (see Sodium hyposulphite).
Titanate, ctns, c.l. works lb. .10½- —
5-ton lots, works lb. .10¾- —
1-ton or less, works lb. .11 - —
Toluene sulfonate, dms., c.l. or t.l lb. .38 - —
l.c.l. lb. .42 - —
Trichloroacetate, 90%, 100-lb. dms., c.l., frt. alld. E lb. .37½- —
c.l., frt. adjusted E lb. .39½- —
50-lb. dms., c.l. frt. alld. E lb. .38 - —
c.l., frt adjusted E lb. .40 - —
10-lb cns., c.l., frt. alld E lb. .44 - —
c.l. frt. adjusted E lb .46 - —
Prices on Sodium trichloroacetate W. of the Rockies are 1¾c per pound higher.
Tripolyphosphate, bgs., c.l., works, frt. equald 100 lbs. 7.87½- —
l.c.l., same basis 100 lbs. 8.27½ 8.87½
Trisilicate, powd., 1:3.2, bgs., c.l., works 100 lbs. 8.65 - —
c.l. works 100 lbs. 9.40 9.80
dms., c.l., works 100 lbs. 9.05 - —
l.c.l. works 100 lbs. 9.80 -10.40
Tungstate, tech., kgs, dlvd. E lb. 2.15 - —
Sodium-ammonium phosphate, bbls., works, frt. equald lb. .23 - —
Sodium-carboxymethyl cellulose (see CMC)
Sodium-cinchophen (see Cinchophen-sodium).
Sodium-formaldehyde sulfoxylate, dms., c.l., dlvd lb. .21 - —
l.c.l., same basis lb. .21½- —
Sodium-zirconyl sulfate, fiber dms., 1,000-lb lots or more works lb. .28 - —
smaller lots, same basis lb. .30 - —
Solvent naphtha, coaltar, high flash, tanks, frt. equald gal. .31 - .32
petroleum (see Petroleum solvent, partial aromatic)
Sorbitan monostearate, fib. dms., 20,000-lb. lots, works lb. .32 - —
10,000 to 20,000-lb lots, works. lb. .34 - —
smaller lots, works lb. .37 - .39
Tristearate, fib. dms., 20,000-lb. lots, works lb. .33 - —
10,000 to 20,000-lb lots, works. lb. .35 - —
smaller lots, works lb. .38 - .40
Sorbitol, cryst., resin grade, pellets, dms., c.l., works lb. .23 - —
1 to 5-ton lots, works. lb. .25 - .26
powd., dms., 1 to 5-ton lots, works lb. .38 - .39
soln., comi., aqueous, dms., c.l., works lb. .24¼- —
ton lots, works lb. .25 - —
smaller lots, works lb. .25¼- —
tanks, works lb. .23¼- —
reg. 70% aqueous, dms., c.l., works lb. .16 - —
ton lots, works lb. .16¾- —
smaller lots, works lb. .17 - —
tanks, works lb .15 - —
Soybean meal, 44% bulk, Decatur. ton 47.50 - —
protein, chemically isolated, bgs., c.l., works lb. .23 - —
mechanically refd., bgs., l.c.l., works lb. .066 - —
Sparteine sulfate, cns oz. .80 - .90
Spearmint leaves, dom., bls lb. 75 - —
Spruce extract, Liq., reg. tanks, works lb. .01¾- —
powd., super, bgs., c.l., works lb. .05¼- —
l.c.l., works lb. .05½- —
Squill, white, bls lb. .16 - .18
powd., bbls., bxs lb. .17 - .20
St. John's bread edible, bls lb. .13 - .15
Stannic chloride, anhyd., dms., works lb. .837 - .847
Oxide, dms., dlvd, E lb. 1.11½- 1.12½
Stannous chloride, anhyd., dms., works lb. .976 - 1.244
hydrous, cryst., dms., works. lb. .85 - .86
Sulfate, dms., works lb. 1.028 - 1.368
Starch, corn, pearl, paper bgs., c.l., 100 lbs. 7.27 - —
t.c.l. 100 lbs. 7.42 - —
powd., paper bgs., c.l. 100 lbs. 7.39 - —
t.c.l. 100 lbs. 7.44 - —
Prices for corn starch in cotton bags, 15c. per 100 lbs. higher.
Potato, dom, Idaho, bgs., c.l., works lb. .06 - —
Maine, bgs., c.l., works lb. .06¼- —
ex whse, N. Y. lb. .08¼- .09¼
Rice, bgs., t.c.l. lb. .15½- .16
Wheat, bgs lb. .08½- .09
Star root (see Helonias root).
Stargrass Root (see Aletris root).
Stavesacre seed, bgs lb. .60 - .61
Stearine oleo (see Oleostearine).
Stramonium leaves, bgs lb. .18 - .20
Soybean meal, 44%, bulk, Decatur.
Streptomycin hydrochloride, bulk, gram. .07 - .0750
Strontium bromide, NF, cns., dms. lb. .80 - 1.05
Carbonate, pure, dms., 5-ton lots or more, works lb. .35 - —
1-ton lots, works lb. .37 - —
tech., dms., works lb. .19 - —
Chromate, bbls., works lb. .46 - —
Iodide, pars, 25-lb. lots lb. 3.45 - —
Nitrate, bbls., c.l., works 100 lbs. 11.00 - —
l.c.l., works 100 lbs. 12.00 - —
Salicylate, NF, dms lb. 1.78 - —
Sulfate, air floated, 90%, 325 mesh, bgs., works ton. 56.70 -66.15
Strophanthin, K., bots. oz. 25.00 -25.50
G. (see Ouabain, USP).
Strophanthus seed, Kombi, biologically tested, bgs lb. 3.50 - 3.75
Styrax, USP, cs lb. .78 - .80
Styrene monomer, polymer grade, 99½%, dms., c.l., frt. alld. lb. .22½- —
t.c.l., same basis lb. .23½- —
tanks, same basis lb. .21½- —
synthetic rubber grade, 99%, dms. c.l., frt. alld lb. .18 - —
l.c.l., same basis lb. .19½- —
tanks, same basis lb. .16 - —
Styrolyl acetate, bots lb. 1.45 - 1.70
Sucrose, refd., white, bgs., refy., E lb. .0885- —
Octa-acetate, denaturing grade, 100-200-lbs., bgs., l.c.l., works lb. .76 - —
Sugar (see Sucrose).
Sulfabenzamide, dms lb. 4.00 - 4.50
Sodium, dms lb. 4.10 - 4.60
Sulfacetamide, fib. dms lb. 4.00 - 4.20
USP, same basis lb. 5.00 - 5.20
Sodium fib dms lb 5.00 - 5.20
USP, same basis lb. 5.20 - 5.40



Davison...leader in Silica Gel

Davison pioneered in the development of the first commercially useful silica gel more than three decades ago, and for years has been America's leading producer. Silica gel, with its porous amorphous physical structure providing a surface area of 90,000 square feet per cubic inch, is a unique compound of continuing importance and increasing application. Silica gel's most important properties are its ability to condense and retain condensable gases in the porous structure and its regenerable nature through the application of heat or other elutriation methods. A wide variety of particle sizes, densities and adsorptive capacities are available, each having been developed to meet specific application demands. Investigate Davison Silica Gel, now.
See your Davison Field Service Engineer or write for technical literature.

DAVISON CHEMICAL COMPANY
Division of W. R. Grace & Co.
Baltimore 3, Maryland

Sales Offices: Baltimore, Md.; Chicago, Ill.; Columbus, Ohio; Houston, Texas; New York, N. Y.; San Francisco, Calif.

Producers of: Catalysts, Inorganic Acids, Superphosphates, Triple Superphosphates, Phosphate Rock, Silica Gels, Silicofluorides:
Sole producers of DAVCO® Granulated Fertilizer.

ask for . . .

Davison Silica Gel for the dehydration of air and gas.

Syloid® 308 . . . lacquer flatting agent.

Syloid® AL-1 . . prevents gas build-up in metallic paint.

Protek-Sorb® 121 . . . for Method II dehydrated packaging.

Syloid® 162 . . . alkyd-urea varnish flatting agent.

Syloid® 244 . . . superior flatting agent in clear alkyd finishes and oleoresinous varnish.

Sulfadiazine, USP, microcrystals, dms lb.10.60 -11.10
powd., dms lb.10.25 -10.75
Sulfadiazine-sodium, USP, dms lb.11.25 -11.75
microcrystals, dms. lb.11.60 -12.10
Sulfaguanidine, USP dms lb. 2.50 - —
Sulfamerazine, USP, microcrystals, lb.10.65 -11.15
Sulfamerazine-sodium, USP, dms., lb.11.25 -11.75
Sulfamethazine, microcrystals, dms., lb. 8.90 - 9.40
powd., dms lb. 8.50 - 9.00
Sulfanilamide, USP 30-80 mesh., dms lb. 1.40 - 1.60
microcrystals, dms. lb. 1.70 - 1.90
powd., dms lb. 1.30 - 1.50
Quinoxaline, veterinary, dms lb. 6.40 - 6.75
Sulfapyridine, NF powd. bots. tins, lb. 7.00 - 7.50
Sulfapyridine-sodium, monohydrate, dms lb. 7.50 - 8.00
Sulfathiazole, NF, microcrystals, dms lb 2.85 - 3.00
powd. dms lb. 2.50 - 2.65
Sulfathiazole-sodium, USP, dms lb. 2.75 - 2.90
Sulfur, coml., flour, bgs., mines, 100 lbs. 2.55 - —
bbls., mines 100 lbs. 3.30 - —
lump, bgs., mines 100 lbs. 2.45 - —
bbls., mines 100 lbs. 2.90 - —
crude, bulk, c.l., mines, contract, long-ton.26.50 - —
export, f.o.b. vessels, Gulf ports long-ton.28.00 - —
domestic and Canada, f.o.b. vessel Gulf port long-ton.28.00 - —
refd., flowers, USP, bgs., mines 100 lbs. 4.25 - —
bbls., mines 100 lbs. 5.50 - —
flour, light, bgs., mines 100 lbs. 3.85 - —
bbls., mines 100 lbs. 4.75 - —
lump, bgs., mines 100 lbs. 3.55 - —
rolls, bgs., mines 100 lbs. 4.10 - —
bbls., mines 100 lbs. 4.65 - —
salt block, bbls., mines.100 lbs. 3.75 - —
virgin block, bbls., mines.100 lbs. 3.70 - —
rubbermakers, coml., reg., bgs., mines 100 lbs. 2.65 - —
bbls., mines 100 lbs. 3.80 - —
98-100% passing through .325 mesh, bgs., mines 100 lbs. 2.75 - —
bbls., mines 100 lbs. 3.90 - —
refd., bgs., mines 100 lbs. 3.50 - —
bbls., mines 100 lbs. 4.55 - —
treated 2.5% mineral oil, bgs., mines 100 lbs. 2.95 - —
bbls, mines 100 lbs. 4.10 - —
Sulfur dichloride, dms., c.l., works, frt. equald lb. .04 - —
l.c.l. same basis lb. .04¾ - —
tanks, same basis lb. .03¾ - —
Dioxide, liq., coml., cyls. works, frt. equald lb. .10 - .12
multi unit cars, works lb. .0535 - —
tanks, works lb. .045 - —
refrigeration 150-lb. cyls., dlvd. lb. .30 - —
Monochloride, 55-gal. dms., c.l., frt. equald lb. .04 - —
c.l. same basis lb. .04¾ - —
tanks, same basis lb. .03¾ - —
Sumac leaves, 28% tannin, bgs., ex-dock ton.130.00 - —
ground, bgs., ex-dock ton.130.00 - —
Superphosphate, run-of-pile, under 22% a.p.a. pulv., bulk, c.l., Balto., unit-ton. .88 - .91
Carteret, N. J. unit-ton. .88 - .91
triple 48% or more a.p.a. pulv., bulk c.l. East Tampa, Fla. unit-ton .98 - —

T

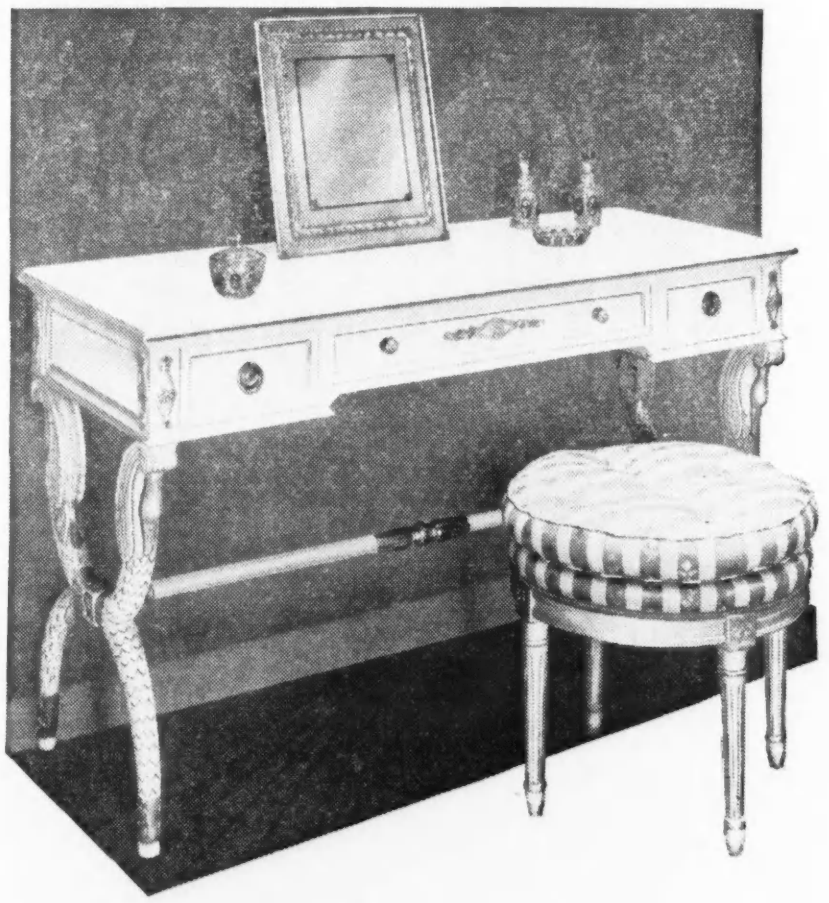
2,4,5-T dms. c.l., works, frt. equald. lb 1.18 - —
l.c.l., same basis lb 1.23 - —
Isopropyl ester, dms., c.l., works, frt. equald lb 1.24 - —
l.c.l., works lb 1.29 - —
Talc, dom. ord. Calif. grd., bgs., c.l., works ton.33.00 -39.50
Vermont off color grd., bgs., c.l., works ton.19 40 - —
l.c.l., works ton.37 00 - —
fibrous, New York, grd., bgs., c.l., works ton.28.00 - —
l.c.l., works ton.31.00 -36.00
99.5%, 325 mesh, bgs., c.l., works ton.31.00 - —
l.c.l., works ton.34.00 - —
99.95% micronized, bgs., works ton.38.00 - —
imp. Canadian grd. bgs., c.l., mines ton.20.00 25.00
Tallow, edible, tanks, dlvd lb. .13¾ - —
inedible, extra, tanks, dlvd lb. .07⅞ - —
fancy, bleachable tanks, dlvd., lb. .08⅛ - —
guaranteed, dms., f.a.s lb. .0980 - —
No. 1, tanks, dlvd lb. .07 - .07⅛
special, tanks, dlvd lb. .07½ - —
sulfonated, 25%, bbls., l.c.l lb. .08¾ - .09
50%, bbls., l.c.l. lb. .09¾ - .10⅛
Tankage, animal, feeding, 9-11% ammonia, bulk unit-ton. 5.00 - —
Chicago, bulk unit-ton. 5.00 - —
Tapioca flour Brazilian bgs., ex whse lb. .10½ - .11
Tar acid oil, 15-18%, dms., c.l., frt. equald gal. .47 - .49
l.c.l., same basis gal. .50 - .51
tanks, same basis gal. .39 - —
25-28%, dms., c.l., same basis. gal. .54 - .56
l.c.l., same basis gal. .57 - .58
tanks, same basis gal. .46 - —
50-53%, dms., c.l., same basis. gal. .70 - .72½
l.c.l., same basis gal. .73½ - .74½
tanks, same basis gal. .62½ - —
Coal (see Coaltar).
Tartar, emetic (see Antimony-potassium tartarate).
Terpine glycol ether, dms., c.l., works lb. .23½ - —
l.c.l. works lb. .25½ - —
tanks, works lb. .22 - —
Hydrate, NF crvst., powd., fib. dms lb. .67½ - .74
Terpinol, dms., l.c.l., dlvd E lb. .23¾ - —
extra, dms lb. .41 - .60
prime, dms lb. .30 - .45
Terpinyl acetate, extra, cns., dms.lb. .60 - .75
prime, dms lb. .55 - .70
Propionate, dms lb. 1.75 - 2.00
Terra alba (see Gypsum).
Testosterone, USP, 100-gm. lots, bots gram. .70 - —
Propionate, USP, 100-gm. lots, bots gram. .68 - —
Tetrachloroethane, dms., works lb. .14½ - —
Tetrasodium pyrophosphate (see Sodium pyrophosphate).
Tetrachloroethylene, tech (see Perchloroethylene).
USP 55 gal. dms., works lb. .20½ - .21½
smaller dms., works lb. .23½ - .25
Tetraethyl orthosilicate, dms., c.l., dlvd. E lb. .61½ - —
l.c.l., dlvd. E lb. .62½ - —
Pyrophosphate, 40%, cns., dms., frt. equald lb. .75 - —
Tetraethylenepentamine, dms., c.l., dlvd. E lb. .49 - —
l.c.l. dlvd. E lb. .50 - —
tanks, dlvd. E lb. .47 - —

Tetrahydrofuran, dms., c.l., or t.l., works lb. .38¼ - —
l.c.l., or t.t.l., works lb. .37 - —
tanks, works lb. .35 - —
Tetrapotassium phosphate (see Potassium phosphate).
Thallium metal, dlvd lb.12.50 -15.00
Sulfate, 99%, bots., dlvd lb. 8.00 -13.00
Theobromine, NF, fib. dms. lb. 4.00 - —
And sodium acetate USP, fib. dms lb. 4.00 - —
Sodio-Salicylate, NF, fib. dms lb. 3.30 - —
Theophylline, anyhd. or USP, 100-lb. dms lb. 3.65 - —
Thiamine hydrochloride, USP, regular, fib. dms kilo.60.00 - —
ampule grade, fib. dms kilo.62.00 - —
Mononitrate, USP, fib. dms kilo.62.00 - —
Thiocarbanilide, dms., ton lots lb. 72 - —
less tons lots lb. 74 - —
Thiodiphenylamine (see Phenothiazine).
Thiourea, tech., bgs., t.l., frt. alld. lb. .33 - —
l.c.l., frt. alld lb. .35 - —
Thorium nitrate, purif., fib. dms., 100-lb. lots or more, works lb. 3.50 - —
dl-Threonine bots., 1-kilo lots. kilo.450.00 500.00
Thymol, fib. dms lb. 2.50 - 2.75
Iodide, NF, dms. lb. 7.30 - —
Timbo root (see Cube root)
Tin chloride (see Stannous chloride, anhydrous).
crystals (see Stannous chloride, hydrous).
Oxide (see Stannic oxide).
Metal (Straits) lb. 1.10 - —
Sulfate (see Stannous sulfate).
Tetrachloride anhyd., (see Stannic chloride, anhydrous).

Titanium dioxide anatase, chalk-resistant, bgs., c.l., dlvd lb. .24½ - —
l.c.l., dlvd. lb. .25½ - —
ceramic, bgs., c.l., dlvd. lb. .22½ - —
l.c.l., dlvd. lb. .23½ - —
reg., bgs., c.l., dlvd lb. .22½ - —
l.c.l., dlvd. lb. .23½ - —
metallurgical, nat., gran., bgs., c.l., f.o.b. Jacksonville, Fla ton.120.00 - —
Niagara Falls, N. Y., c.l., ton.137.50 - —
5-ton lots ton.142.50 - —
ton lots ton.147.50 - —
rutile nonchalking, bgs., c.l., dlvd E lb. .26½ - —
l.c.l., dlvd. E. lb. .27½ - —
Milled titanium dioxide, $7.50 per ton higher
Hydride, cns., works lb. 7.95 - 9.00
Pigment, calcium-rutile base, reg., bgs., c.l., dlvd lb. .09¼ - —
l.c.l., works lb. .09¾ - —
high-tinting, dms., c.l. lb. .09 - —
l.c.l. lb. .09½ - —
Tetrachloride, tech., dms., c.l., works lb. .40¾ - —
l.c.l., works lb. .43¾ - —
tanks, works lb .39¾ - —
dl-a-Tocopherol, bots kilo.134.20 - —
Acetate kilo.122.00 - —
dry kilo.31.00 - —
Acid succinate kilo.165.00 - —

o-Tolidine, base, paste, kgs., 100% basis lb. 1.35 - —
dry, kgs., 100% basis lb. 1.40 - —
Hydrochloride, paste, kgs., 100% basis lb 1.35 - —
Tolu balsam, cns lb. 4.85 - —
Toluene (see Toluol).
p-Toluenesulfonamide, powd., dms., works lb. 70 - —
m-Toluidine, dms., c.l., works, frt. alld lb. 79 - —
l.c.l. same basis lb. 80 - —
tanks same basis lb 78 - —
o-Toluidine, dms., c.l., works, frt. alld lb. 23 - —
l.c.l. same basis lb. 24 - —
tanks, same basis lb 22 - —
p-Toluidine, flake, dms., frt. alld lb. 64 - —
solid dms. frt. alld lb. 60 - .61
Toluol, coaltar, tndust. or nitration, tanks, works:—
Bethlehem, Pa gal. .32 - —
Birmingham dist gal. .32 - —
Chicago, dist gal. .32 - —
Cleveland dist gal. .32 - —
Geneva, Utah gal. .26 - —
Johnstown, Pa gal. .32 - —
Lackawanna, N. Y gal. .32 - —
Lone Star, Tex gal. .33 - —
Lorain, Ohio gal .32 - —
Middletown, Ohio gal. .33½ - —
Minnequa, Colo. gal. .32 - —
Philadelphia dist gal. .32 - —
Pittsburgh dist gal. .32 - —
Sparrows Point, Md gal. .32 - —
Terre Haute, Ind gal. .35 - —
Youngstown, Ohio gal .32 - —

Dressing table by Brunovan, Inc.



look... it's TITANOX*

She'll be sitting pretty! And the attractive whiteness that brings out the gracious lines of her period furniture is no accident. It's the TITANOX white pigment that makes the finish hide so well and look so good.

TITANOX is the No. 1 choice in white pigments not only for furniture finishes but also for all paints, plastics, ceramics, paper, rubber and anything that needs white pigment. Titanium Pigment Corporation (subsidiary of National Lead Company), 111 Broadway, New York 6, N. Y.; Atlanta 5; Boston 6; Chicago 3; Cleveland 15; Houston 2; Los Angeles 22; Philadelphia 3; Pittsburgh 12; Portland 14, Ore.; San Francisco 7. In Canada: Canadian Titanium Pigments Limited, Montreal 2; Toronto 1; Vancouver 2.

*TITANOX *is a registered trademark for the full line of titanium pigments sold by Titanium Pigment Corporation.* 4202

Toluol—Wattle Bark

Toluol, petroleum, indust., 2°, tanks, works:—Albany, N. Y. gal. .35 • —
Bayonne, N. J. gal. .34 • —
Baytown, Tex. gal. .33 • —
Chicago, Ill. gal. .35 • —
Detroit, Mich. gal. .35 • —
Houston, Tex. gal. .33 • —
Philadelphia, Pa. gal. .34 • —
Providence R. I. gal. .35 • —
Wood River, Ill. gal. .34 • —

2,4-Tolylenediamine cryst., fib. dms., c.l., frt. alld lb. .97 • —
l.c.l., frt. alld lb. 1.00 • —
powd., fib. dms., same basis lb. 1.00 • —

Tonka beans, Angostura, cks. lb. No prices.
Brazilian, Surinam, cs lb. 1.35 • —

Totaquine 100-oz. lots, cns oz. .42 • —

Toxaphene, dms., c.l., t.l., works lb. .21 • —
l.c.l., l.t.l., works lb. .27 • —

Triacetin, dms., c.l., dlvd. E. of Rockies lb. .39 • —
l.c.l., same basis lb. .40 • —
tanks, same basis lb. .37 • —

Tributyl citrate, tech., non-ret, dms., c.l., frt. alld. E. of Denver lb. .42½- —
l.c.l., frt. alld. E. of Denver. lb. .43½- —
tanks, frt. alld. E. of Denver. lb. .40 • —

Phosphate, dms., c.l., works lb. .52½- —
l.c.l., same basis lb. .53½- —
tanks, same basis lb. .50 • —

Tributylamine, dms., c.l., works lb. .67½- —
l.c.l., same basis lb. .68¼- —
tanks, same basis lb. .65 • —

Trichlorobenzene, dms., c.l., frt. alld. E. lb. .14½- —
l.c.l., frt. alld. E. lb. .15½- —
tanks, frt. alld. E. lb. .13 • —
Trichlorobenzene prices in the West 1¾c. higher.

Trichloroethylene, dms., c.l., or t.l., works, frt. equald. lb. .12½- —
l.c.l., dlvd. E. lb. .14½- —
tanks, works, frt. equald. lb. .11¼- —

1,1,1-Trichloroethane, dms., c.l., works lb. .13½- —
l.c.l., works lb. .14¼- .16¼
tanks, works lb. .11½- .12½

Tricholine citrate, 85% soln., ret. chys., works, frt. adjusted lb. 1.40 - 1.45

Tricresyl phosphate, coaltar, dms., c.l., dlvd. lb. .37 • —
l.c.l., dlvd. lb. .38 • —
tanks, dlvd. lb. .34½- —
petroleum, dms., c.l., dlvd. lb. .36½- —
l.c.l., dlvd. lb. .37½- —
tanks, dlvd. lb. .34½- —

Triethanolamine, dms., c.l., dlvd. E lb. .24½- —
l.c.l., same basis lb. .25½- —
tanks, same basis lb. .22 • —

Triethylamine, dms., c.l., works, dlvd. E. lb. .49 • —
tanks, same basis lb. .46¼- —

Triethyl citrate, refd., tech., non-ret. dms., c.l., frt. alld. E. of Denver lb. .45¾- —
l.c.l., frt. alld. E. of Denver, lb. .46¾- —
tanks, frt. alld. E. of Denver, lb. .43¾- —

Phosphate, dms., c.l., dlvd. lb. .40½- —
l.c.l., dlvd. lb. .41½- —
tanks, same basis lb. .38 • —

Triethylene glycol, dms., c.l., dlvd. E. lb. .21 • —
l.c.l., same basis lb. .22 • —
tanks, same basis lb. .18½- —

Triethylenetetramine, dms., c.l., dlvd. E. lb. .51½- —
l.c.l., dlvd. E. lb. .52½- —
tanks, dlvd. E. lb. .49 • —

Tri-isopropanolamine, dms., c.l., dlvd. E. lb. .23¼- —
l.c.l., dlvd. E. lb. .24¼- —
tanks, dlvd. E. lb. .20¾- —

Trimethylamine 25-40% soln., dms., c.l., works, frt. equald., 100% basis lb. .42 • —
l.c.l., works, frt. equald, 100% basis lb. .42½- —
tanks, works, frt. equald, 100% basis lb. .33 • —

Trioxane, pure, dms., c.l., t.l., dlvd. E. lb. .50 • —
l.c.l., dlvd. E. lb. .51½- —

Tripentaerythritol, bgs., l.c.l., works. lb. .38 • —

Triphenyl phosphate, bbls., c.l., frt. equald. lb. .40 • —
l.c.l., frt. equald lb. .41 • —

Triphenylguanidine, bbls., works lb. .90 • —

Tripropylene glycol, dms., c.l., frt. alld E. lb. .20½- —
l.c.l., frt. alld. E. lb. .21½- —
Tripopylene glycol prices 1c. per lb. higher in West.

Phosphate (see Sodium phosphate tribasic).

Tyrothricin, USP, bots. gram. .75 • .85

dl-Tryptophane, fib. ctns., works. kilo.165.00 • —

Tungsten metal powd., 2-5 microns, dms., works lb. 4.20 • —

Turpentine, gum (see Protective Coatings market, Naval Stores).

U

Unicorn root, false (see Helonias root).
True (see Aletris root).

Urea, 46% N, indust., bgs., c.l., t.l., dlvd. E ton.120.00 • —
l.c.l. dlvd. E, ex whse ton.140.00 • —
45% N. agricultural, bgs., c.l., (30 tons), dlvd., E ton.105.00 • —

Urea-ammonia liquor, A and B grades N basis, tankcars, Belle, W. Va ton.126.00 • —
C grade, tankcars, same basis. ton.124.50 • —
37 grade, tankcars, same basis. ton.153.00 • —

Urethane, USP, dms. lb. 1.45 • —

Uva-ursi leaves, bls. lb. 12 • .14

V

Valerian root, Belgian, bgs. lb. .35 • —
Indian, bgs. lb. .27 • —

dl-Valine, dms., works lb. 21.00 - 27.50

Valonia beards, 40-42% tannin, bgs., ex dock ton.86.00 • —
cups, 28-30% tannin bgs., ex dock ton.64.00 • —
extract, powd., 63% tannin, bgs., exdock, duty extra lb. .09¾- —

Vanadium pentoxide, tech., dms., works lb. 1.28 - 1.33

Vanilla beans, Bourbon, tins lb. 8.50 • —
Mexican, cuts, tins lb. 8.00 • —
whole, tins lb. 8.75 • —
Tahiti, cs lb. 7.00 • —

Vanillin, ex eugenol, tins, 25-lb lots lb. 6.50 - 6.75
smaller lots lb. 6.90 - 7.25
ex lignin, dms., 100-lb. lots lb. 2.75 • —
smaller lots lb. 2.80 - 2.85

Vinyl acetate monomer, 55-gal. dms., c.l., dlvd. E lb. .19 • —
l.c.l., dlvd. E. lb. .20 • —
tankcars, dlvd. E lb. .16½- —
tanktrucks, less than 4,000 gal., dlvd E lb. .17½- —

n-Butyl ether, tech., dms., c.l., works lb. .28 • —
l.c.l., works lb. .30 • —
tanks, works lb. .27 • —

Chloride monomer, tanks, works lb. .11 - .12

Ether, USP, anesthesia, bots., 50 c.c., hospitals bot. 1.12 • —
75 c.c. bot. 1.56 • —
tech., dms., c.l., works lb. .26 • —
l.c.l., works lb. .28 • —
tanks, works lb. .25 • —

Isobutyl ether, tech., dms., c.l., works lb. .28 • —
l.c.l., works lb. .30 • —
tanks, works lb. .27 • —

Methyl ether, cyls., works lb. .23 • —
tanks, works lb. .20 • —

Cylinders are sold outright, or if shipped against deposit, a free perio. of 60 days is allowed; and if empties are returned prepaid and in good condition within that period, full refund is made

Propionate monomer, dms., c.l., dlvd lb. .49 • —
l.c.l., same basis lb. .50 • —
tanks, same basis lb. .47 • —

Trichloride (see Trichloroethane)

2-Vinylpyridine, 10 dms. to tanks, works lb. 1.36 • —
1 to 9 dms., works lb. 1.50 • —
tanks, works lb. 1.33 • —

Vinyltoluene, dms., c.l., frt. alld lb. .18½- —
l.c.l., frt. alld. lb. .19½- —
tanks, frt. alld. lb. .16 • —

Viosterol in nat. vegetable oil, 400,000 to 1,000,000 D units per gram, bots., lots of 10 billion USP units, 1,000,000 units. .02 • .04¾
in alcohol, lots of 1 billion USP units, 1,000,000 units. .025 • .05¼

Vitamin A acetate, syn. crystalline, beads 500,000 A units per gram gram. .07¼- —
dry, 500,000 units per gram, kilo lots kilo.67.50 • —
325,000 units per gram, same basis kilo.43.88 • —
250,000 units per gram, same basis kilo.33.75 • —

Dry vitamin A acetate in less than kilo lots, $2.50 per kilo higher in all potencies

liq., in oil, 1,000,000 A units per gram 1,000,000 units. .10 • —
Palmitate, liq., 1,000,000-1,800,000 A units per gram 1,000,000 units. .10 • —
in oil, 1,000,000 A units per gram 1,000,000 units. .10 • —

B_1 (see Thiamine hydrochloride).
B_2 (see Riboflavin)
B_6 complex natural (see Rice bran concentrate and Yeast).
B_{12} crystalline, 1-gram or 5-gram vials gram.245.00 • —
oral grade solids, in containers of 1 and 5 grams of B_{12} activity gram.185.00 • —

C (see Acid, ascorbic).
D (see Oils, codliver and fish-liver Calciferol, and Viosterol)
D_2, dry 850,000 units per gram, kilo lots kilo.42.50 • —
less than kilo lots kilo.45.00 • —
E (see a-Tocopherol and Oil, wheat germ).
G (see Riboflavin)
H (see Biotin).
K Active (see Menadione).
K_1, 25 gram bots gram. 4.50 • —

Violet methyl toner (see Blue methylviolet toner)

V.M.&P. naphtha (see Petroleum naphtha).

W

Wahoo root, bark, bls. lb. 2.25 • —

Warfarin, 0.5%, dms., 50-lb. lots, dlvd lb. 1.95 • —
25-49-lb. lots, N. Y. or Chicago. lb. 2.05 • —
5-24-lb. lots, cns., N. Y. or Chicago lb. 2.15 • —

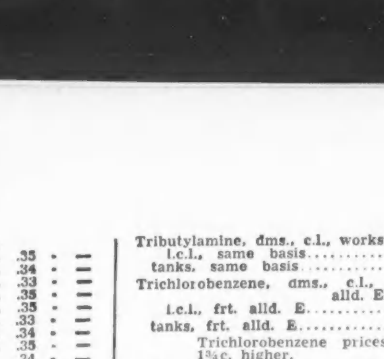
Wattle bark, fair average, African, bales, ex dock ton.95.00 -96.00
merchantable bales, ex dock ton.91.00 -92.00

Investigate

CONOCO H·300

the extender of profit

SECONDARY PLASTICIZER



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Conoco H-300, in addition to possessing a number of other outstanding properties, is unique in its stability to discoloration caused by exposure to light. Fadometer tests prove that films containing H-300 show light stability *equal to or better than* those with no extenders. Just how economical it is may be seen from the fact that Conoco H-300 can be used to the extent of 25% of the total plasticizer required.

Conoco H-300 is available in either tank cars or drums.

Some of the other outstanding advantages of CONOCO H-300

- **Lower initial and aged viscosities in plastisols or organosols**
- **Improved mixing of formulations**
- **Greater low-temperature flexibility**
- **Saves as much as 2 cents a pound on the finished product**

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CONTINENTAL OIL COMPANY

Wattle extract, liq., 35% tannin, bbls.,	lb.	.08¼	.08¾
solid, E. Africa, 60% tannin, bgs., ex dock, duty extra	lb.	.09¾	—
S. Africa, 60% tannin, bgs., ex dock, duty extra	lb.	.10	—
Wax, amorph. (see Wax micro-crystalline)			
Bayberry, bgs	lb.	.45	47
Bees, crude, African, bgs	lb.	.72	Nom.
Brazilian, bgs	lb.	.75	Nom.
Central American, bgs	lb.	.68	Nom.
Chilean, bgs	lb.	.75	Nom.
refd., USP, bleached, white bricks, 100-lb. ctns	lb.	.80	82
slabs, 100-lb. ctns	lb.	.79	.81
yellow, bricks, 100-lbs. ctns.	lb.	.71	73
slabs, 100-lb. ctns	lb.	.70	72
Candelilla, crude, bgs	lb.	.70	.71
refd., bgs	lb.	.73	.74
Powdered candelilla: 20 to 100 mesh, 7c higher.			
Carnauba, chalky, bgs., ton lots	lb.	.68	.69
North country No. 2, crude, bgs., ton lots	lb.	.74	.75
refd. pure, bgs. ton lots	lb.	84	.85
No. 3, Ceara, crude, bgs., ton lots	lb.	.69	.71
refd. pure, bgs., ton lots	lb.	.78	.80
tech., bgs., ton lots	lb.	.70	.72
Parnahyba, crude, bgs., ton lots	lb.	.70	.72
refd. pure, bgs., ton lots	lb.	81	.82
yellow No. 1, Ceara, bgs., ton lots	lb.	1.42	1.44
Parnahyba, bgs., ton lots	lb.	1.4	1.46
Powdered carnauba wax price differentials same as powdered candelilla			
Japan, cs	lb.	.49	.50
Microcrystalline, coating grades, tankcars, works	lb.	.10	.11
laminating grades, tankcars, works	lb.	.11	.12
Montan, dom., refd., bgs	lb.	.29	.30
imp., crude, Bohemian, bgs	lb.	.26	.28
German, bgs	lb.	.35	Nom.
Ouricury, refd., pure, bgs	lb.	.89	.91
tech., bgs	lb	85	Nom.
Paraffin (see P)			
Spermaceti, blocks, cs	lb.	.30	.33
cakes, cs	lb	.31	.34
Sugar cane, dom., refd., slabs, 80 lbs. ctns., works	lb.	.65	.75
spot	lb.	67¼	72¼
White lead (see Lead White).			
White pine bark, rossed, bls	lb.	.18	.19
White precipitate USP powd. dms.,	lb.	6.55	—
Whiting (see Calcium carbonate)			
Wild cherry bark, thin, nat., bls	lb.	.20	—
rossed, bls	lb.	.21	—
Witch hazel bark bls	lb.	.16	.17
leaves, bls	lb.	.27	—
Wollastonite fine bgs., c.l., works	ton	39.50	—
l.c.l., ex whse	ton	56.00	—
medium, bgs., c.l., works	ton	27.00	—
l.c.l., ex whse	ton	44.00	—
Woolfat, crude (see Degras), USP (see Lanolin)			
Wormseed, American bgs.	lb.	.20	.25
Levant, bgs.	lb.	4.25	4.50
45°-47°C., dms., c.l. same basis.			

X

Xylene (see Xylol)			
Xylenol cryst. 58°-60°C., m.p., dms.,			
l.c.l., works	lb.	.40	—
56°-58°C., dms., l.c.l., works, frt. equald	lb.	.30	—
	lb.	.212	—
l.c.l. same basis	lb.	.215	—
tanks, same basis	lb	199	—
fraction, b.r., 7°-9°C., dry above 227°C., dms., c.l., same basis	gal.	.96	—
l.c.l. same basis	gal.	.99	—
tanks, same basis	gal.	.85	—
dry at or below 227°C., dms., c.l., same basis	gal.	1.11	—
l.c.l. same basis	gal.	1.14	—
tanks, same basis	gal.	1.00	—
Xylidines, mixed, o-m-p, dms., c.l. or t.l., works	lb.	.39	—
l.c.l. same basis	lb	.40	—
tanks, same basis	lb	.38	—
Xylol, coaltar, indust., tanks, works:—			
Bethlehem, Pa.	gal.	.34	—
Birmingham dist.	gal.	.32	—
Chicago dist.	gal.	.33	—
Cleveland dist.	gal.	.34½	—
Geneva, Utah	gal.	.27	—
Johnstown, Pa.	gal.	.33	—
Lackawanna, N. Y.	gal.	.35	—
Lone Star, Tex.	gal.	.33	—
Lorain, Ohio	gal.	.33	—
Middletown, Ohio	gal.	.34	—
Minnequa, Colo.	gal.	.34	—
Philadelphia dist.	gal.	.34	—
Pittsburgh dist.	gal.	.32	—
Sparrows Point, Md.	gal.	.34	—
Terre Haute, Ind.	gal.	.33	—
Youngstown, Ohio	gal.	.32½	—
petroleum, indust., tanks, works:—			
Bayonne, N. J.	gal.	.34	—
Baytown, Tex.	gal.	.33	—
Chicago, Ill.	gal.	.35	—
Houston, Tex.	gal.	.33	—
Philadelphia, Pa.	gal.	.34	—
Providence, R. I.	gal.	.35	—
Wood River, Ill.	gal.	.33	—

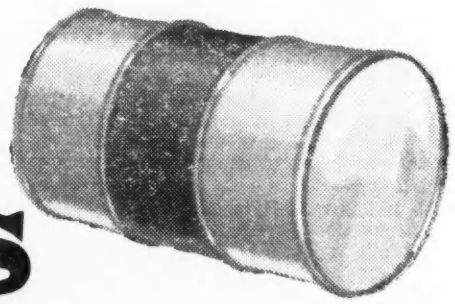
Y

Yara, yara, cns.	lb.	2.13	2.63
Yeast, brewer's, dry, USP, 50 int'l B units per gram, 100-lb. dms	lb.	.47	—
90 int'l B units per gram, 100-lb. dms	lb.	.52	—
200 int'l B units per gram, 100-lb. dms	lb.	.56	—
300 int'l B units per gram, 100-lb. dms	lb.	.60	—
debittered, USP, Saccharomyces, dlvd.	lb.	.27	—
Torula, USP, dlvd.	lb.	.18	—
Yellow, barium chromate, CP, bbls., dlvd N. of Tenn. and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island, St. Louis, St. Paul	lb.	.33	—
Yellow barium chromate price differentials in other States and city zones are those for chrome yellow below			
Benzidine, AAA, bbls., dlvd.	lb.	2.10	—
AAOT bbls., dlvd.	lb	2.85	—
Lightfast, bbls., dlvd.	lb	3.15	—
Cadmium, CP, all shades, bbls., frt. alld E. of Rockies	lb.	2.85	—
Selenide lithopone, all shades, bbls., frt. alld. E. of Rockies	lb.	1.05	—
Cadmium yellows, Los Angeles and San Francisco, ex whse., 1c. per lb. higher			
Yellow, chrome, CP, bbls, dlvd. N. of Tenn., and N. C., E. of Miss., including Davenport, Minneapolis, Rock Island	lb.	.33	.33½
Dlvd. Ala., Fla., Ga., La. (Shreveport 1½ higher); Miss., N. C., S. C., Penna., Dallas, Tex. 1½c. higher; Ft. Worth, Tex. 1½c. higher; El Paso, Tex. 2c. higher; Cedar Rapids, Des Moines, Kansas City, Lincoln, Omaha, St. Joseph 1.6c. higher; dlvd Pac. Coast, for Denver, Pueblo, Salt Lake City, Wichita prices are equalized with Chicago.			
Hansa, 10 g. bbls., same basis as yellow, chrome	lb.	2.23	—
G pigment, bbls	lb.	1.91	—
Iron oxide, natural, French type, bgs., c.l., works	lb.	.06	—
Peruvian type, bgs., l.c.l.	lb.	.0203	.0345
pure, bgs., c.l., works	lb.	.11½	—
l.c.l., works	lb	.11¾	—
Mercury, oxide, bbls., 1,000-lb. lots.	lb.	5.58	—
smaller lots	lb	5.60	—
Ocher (see Yellow, iron oxide, natural).			
Zinc (chromate), bbls, dlvd	lb.	.27	.27½
basic, bbls., dlvd	lb.	.31	.32½
Yerba santa leaves, bls	lb.	.40	.42
Yohimbine hydrochloride, bots, tin	oz.	3.73	4.23

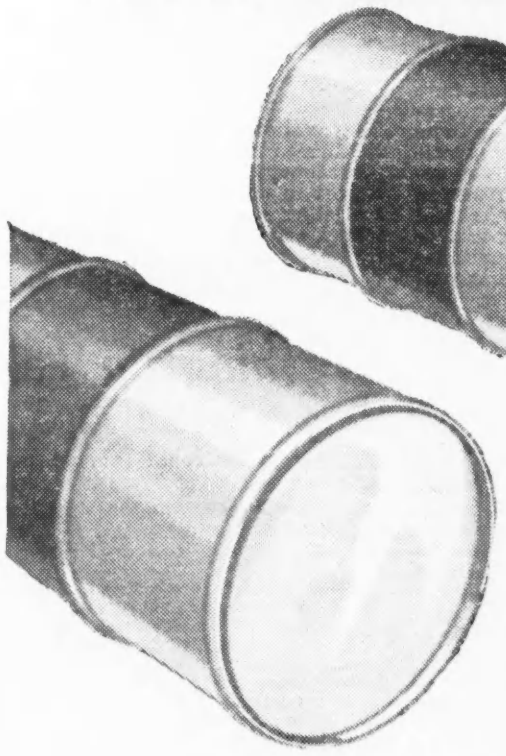
Z

Zein, bgs., 36,000-lb. lots or more	lb.	.38	—
1,000 to 36,000 lb. lots, works	lb	.40	—
smaller lots, works	lb.	.43	—
Zinc acetate, NF VIII, dms.	lb	.53	—
tech., dms., works	lb.	.29½	.29¾
Borate, bgs., c.l., dlvd. E.	lb.	.192	—
l.c.l. dlvd. E	lb	.202	—
Zinc chloride, NF, gran., dms.	lb.	.42	—
precip., powd., dms.	lb.	.26	—
soln. 50% dms. c.l. works, 100 lbs.		5.80	—
l.c.l., works, 100 lbs.		6.40	—
tanks, works, 100 lbs.		5.15	—
tech., fused, dms., c.l., works, 100 lbs.		10.70	—
l.c.l., works, 100 lbs.		11.20	—
gran fib dms., c.l., works, 100 lbs.		11.45	—
l.c.l., works, 100 lbs.		11.95	—
Chromate (see Yellow, zinc).			
Cyanide, kgs., 1,000-lb. lots or more, works	lb.	.523	—
smaller lots, works	lb.	.543	—
Dust, pigment, bbls., c.l., works	lb.	.17½	—
l.c.l., works	lb.	18½	—
Fluoride, bbls., works	lb.	.49	.50
Hydrosulfite, dms., c.l. frt alld	lb.	.21½	—
l.c.l. frt. all.	lb	.22	.37½
Metal, prime western slabs, E. St. Louis	lb.	.13½	—
New York	lb.	14	—
Naphthenate, liq., 8% Zn., dms., frt. Alld	lb.	.24½	—
10% Zn. dms. frt. alld	lb.	.30	—
Nitrate, tech., cryst., bbls., works,	lb	.20	—
Oxide pigment, American process, lead-free, bgs., c.l., frt. alld	lb.	.14½	—
l.c.l. same basis	lb.	15½	—
leaded, 35%, bgs., c.l., mills, frt. alld	lb.	.15½	—
l.c.l., same basis	lb.	.16½	—
Zinc oxide pigment, American process, leaded, 50%, bgs., c.l., same basis	lb.	.15⅞	—
l.c.l., same basis	lb.	16⅞	—
French process, coml., green seal, bgs., c.l., frt. alld	lb.	.15¾	—
l.c.l., same basis	lb.	16¾	—
red seal, bgs., c.l., same basis	lb	15¼	—
l.c.l., same basis	lb	16¼	—
white seal, bgs., c.l., same basis	lb.	.16¼	—
l.c.l., same basis	lb	.17¼	—
USP, ctns., c.l., frt. alld	lb.	.17¼	—
l.c.l., same basis	lb	18¼	—
Zinc oxide Pac. coast prices 1c. higher.			
Phenolsulfonate, NF, gran., dms.	lb	.39	—
powd. dms	lb	42	.49
Resinate, precip., 7.2-7.6% Zn., dms, frt alld	lb	.29	—
Silicofluoride, dms., works	lb.	.12½	.14
Stearate, tech. USP, ctns, c.l	lb.	.39	—
	lb	.39	—
l.c.l.	lb.	40	.44
Sulfate, powd., monohydrate, 36% Zn, bgs, c.l. dlvd E	100 lbs	8.75	—
l.c.l., dlvd E	100 lbs	9.75	—
Zinc sulfate in bbls 40c higher			
USP, gran, dms	lb	26	—
Sulfide, pure, bgs., c.l., dlvd	lb.	.2530	—
Undecylenate, dms	lb	2.23	2.50
Yellow (see Yellow, zinc)			

—Continued on page 79



HARSHAW DRIERS



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Linoresinate Liquids
Linoleate Liquids
Lithos
Octasols
Pastes
Pastalls

SOLID DRIERS
Uversol (Naphthenate) Solids
Linoresinate Solids
Linoleate Solids
Soyate Solids
Fused Resinates

POWDERED DRIERS
Precipitated Resinates
Drying Salts:
Cobalt Lead Manganese Zinc

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- Color
- Viscosity
- Total solids content
- Flash point (TCC)
- Moisture content
- Acid value
- Miscibility with raw linseed oil
- Miscibility with mineral spirits
- Benzene insoluble content
- Customer's specified tests

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Volume 170 **November 19, 1956** **No. 21**

For Businesslike Government

Every payer of a federal tax—income, excise, or whatsoever—should insist that his hired and paid representative in congress find out fully and accurately where goes each and every dollar thus derived from his constituents, and see that they are properly informed in that respect. Every taxpayer should insist that his local newspaper give that information complete circulation, even though some of the least justifiable disposition of such contributions be directed to the providing of benefits on some far from logical economic basis for a goodly proportion of the community's population.

Although it has recently made some substantial reductions, the federal government is still spending too much money, both on itself and on some of its people. More than a little of that spending is by way of readily remediable, largely inexcusable inefficiency and waste.

The remedying of those costly faults is again being examined and approached by way of the recommendations of the second Hoover commission. The director of the Budget Bureau has called upon all federal agencies to establish financial programs that will effectively implement and apply the recommendations of the commission on budget and accounting, so as to give proper effect to applicable recent legislation—of which there has not been nearly enough, much more progress having been made with respect of recommendations which called only for administrative action.

That is the subject for a second chapter in the informative service which should be demanded of every federal legislator by way of the local newspapers of his district. The published treatise should include the informative data and comment presented to the President last month in a report on the progress under the commission's recommendations by his special assistant in the program for their adoption.

The people should know where their money is going through the intermediation of the federal government. They should know why it is going in each and every channel involved. They should know the extent to which those channels are leaky, and what has been suggested, what is being done, for the stopping of those leaks. The people should know why the President's assistant should have reason to report that the cooperative spirit demonstrated by heads and staffs of administrative units has contributed to "definite progress" toward the effective application of the recommendations of the Hoover commission, while only "modest progress" has been made legislatively —and "much remains to be done."

What the head of the Budget Bureau has asked of administrative agencies will contribute well to further definite progress toward putting the nation's biggest business in common good business shape. But, there will remain the imperative need that the necessary legislative contribution be provided without further delay. In some important instances, that contribution must have to do with matters that are controversial. Adequate information on those matters also should be made available to all those who are more or less accurately represented in the processing of federal legislation. They should know what that processing should be concerned with in the recommendations designed to make governmental business functioning businesslike. They should be given proper guidance in the analysis and appraisal of those recommendations and in the conveying of their resulting judgment to their legislative processors.

It goes without much saying, that the providing of the people of any community with the information, guidance, and leadership essential to their effective insistence upon greater efficiency, economy, and saving in governmental functioning—legislative, as well as administrative—as a really big business, for which they must pay, is a task for the business leaders of that community. They have the necessary experience. It will pay them to make proper use of it in the opportunity now opening before them.

A Study in Dimensions

"New Dimensions for America" will be the theme of the sixty-first Congress of American Industry, sponsored by the National Association of Manufacturers, to be held in New York December 5 to 7. The dimensions, assumably, will have to do with all sorts of things, from motivation, one of the earliest implements of doing business, to the impact of the "peacetime atom," one of the latest—and having very little relation to the long-time elemental identity of the second component of the term. They will run from "Faith" (with a capital F) to the future of selling (where the word is usually wholly in capitals).

Because of some references in recent business—or economic—utterances to the depth of hope that activities will go to still greater heights, it is not easy to conceive just what these new dimensions are expected to be. In these days of nuclear, electronic, and stratospheric expanses, dimensions are of many sorts. There are many, still old-fashioned enough to interpret the term as length, breadth, and thickness, who are puzzled over whether the newness will be in the direction of biggerness or littlerness, and in which of those three dimensions. Some are inclined to believe that one of the most needed new dimensions in all human affairs is greater depth of thinking, which they feel would, or at least could, do something toward lessening the quite prevalent thickness in that respect.

The industrial congress is going to have more than a little commendable depth in desirable thinking. It is going to have a special side session on distribution—a most importantly necessary subject of deep thinking in these days of overstressing of production. It is going to provide opportunity for especially deep thinking on "Factors in Economic Growth and Inflation." The differentiation of those two "dimensions" in much current thinking is neither informative nor convincing.

There already has been an encouraging trend in thinking on another topic of the congress—"Labor-Management Trends." There is room and much reason for still more, still deeper thinking in that area. The congress can be expected to contribute helpfully.

Another of the side sessions will be devoted to plant-community relations, which are the second step in the direction of actual public relations—as distinguished from the customary public relatings. The first step is covered quite appreciatively in a recently issued NAM publication—"Dealing with Employees as Individuals."

Obviously, the representation of American industry in its coming congress will have length and breadth of scope. It, doubtless, will have also depth—or is it height—of ability. Arrangements are being made to give the proceedings of the congress and the informative identification of the many things which are contributory to its significance nationwide circulation in educational and social, as well as business, areas. It has not been necessary to wait until a scheduled speaker has told the gathering that "The People Want to Know" It is recognized that the people have a right to know—and that their knowing will contribute to the maintenance of a strong, solid three-dimensional support for the American economic structure.

Human Relations of Selling

However more or less aggregatedly it may be termed—selling, distributing, or marketing—the outgo side of any business is largely a matter of human relations. Because those relations have many aspects, even in their role as a business factor, the problems which they present are many and complex. They vary widely in a far from definite accordance wtih the interactions of the attractions of what is being disposed of and the somewhat related needs or desires of those looked to as potential accepters thereof.

Fundamentally important, even imperative, in the application of knowledge of human relations to the promotion of business outgo is recognition of the fact that the extent to which the commercial aspects of those relations are a prime or major factor in such application depends upon many things. Those aspects do not stand alone in that respect, despite the much proclaimed—and accepted—popularity of bargains. Satisfaction has a much more lasting, hence more desirable, effect than mere saving.

An area of outgo promotion in which the human relations involved are very predominantly other than commercial is that in the field of pharmaceutical specialties, where selling has very little, if any, contact with the consumer. It is, therefore, a peculiarly complicated practice, with two objectives which cannot always be brought into desirable close harmony.

The eastern marketing section of the American Pharmaceutical Manufacturers Association is going to have a session of timely important interest December 10 in New York. Although the program as thus far announced does not indicate that the peculiar human relations involved in the marketing of ethical products will get particular attention, it must be expected that there will be much consideration of such important material problems as the preventing of the piling up of partly emptied containers on the shelves of pharmacists as a consequence of physicians' forgetting all about a product to which they were attracted by presentations made some weeks earlier by a detail man—and pushed out of their minds by the pressure of several subsequent similar presentations of other products of the same, somewhat similar, or wholly different therapeutic applicability.

The handling of that problem may get some consideration in the "Do-it yourself" part of the approaching marketing session. But, those who have had practical experience with it know that the big need is for the development and maintenance of proper cooperation with—and by—the pharmacists who have stocked a product in anticipation of its prescribing by the physicians of their neighborhoods, which they had been led, with more or less justification, to expect.

Washington Talks It Over

Gross National Product Reported Hitting a New High; Gross National Income Seems to Be Doing the Same Thing.

By Ralph L. Cherry
Chief, OPD Washington Bureau

Gross national product, which is an accounting of the amount of money being spent for goods, services and investment and is a measure of the nation's prosperity, is hitting another new high this year. During the third quarter, GNP was at an annual rate close to $414 billion, up $5.5 billion from the second quarter and $10.5 billion from the first.

In much the same manner, gross national income which represents compensation of employees, proprietors' and rental income, corporate profits, and net interest, also is headed for a new record. Preliminary third quarter estimates place the national income at $342.9 billion, which is up about $4 billion from the second quarter and about $8 billion from the first quarter.

In 1955 the gross national product reached the previous record high of $390.9 billion from the 1954 total of $360.7 billion. National income in 1955 amounted to $324 billion and in 1954 it was $298.3 billion.

The Office of Business Economics of the Department of Commerce, which keeps tabs on these changes in the nation's economic pulses, says that the major third quarter increases in GNP from the second quarter were in consumption expenditures and in business outlays for plant and equipment. The rate of inventory investment was somewhat lower.

It appears that consumers spent about the same for durables as in the second quarter, but a little more for food and nondurables. Business purchases of new capital equipment went up about $2 billion, but inventory accumulation was down about $3.5 billion. The effects of the steel strike influenced this change, but inventory-building slowed on a quarterly basis in a number of manufacturing industries now affected by the strike, and retailers' stocks of nondurables expanded less than in the preceding quarter.

A Job for Fertilizer

There's a big job ahead for the fertilizer industry. Economists of the Department of Agriculture, in sizing up the production job ahead of farmers during the next twenty years, warn that sizable adjustments will be needed to balance farm output with changing market demand.

There probably will be about 210 million people in the United States to feed and clothe in 1975—a fourth more than the 165 million in mid-1955. Based on that and other assumptions, the economists see a need for one-third more agricultural products in 1975 than in 1951-53.

The biggest need will be for increased meat supplies—about a 50 percent increase in production of cattle and calves, 40 percent in hogs and 25 percent in sheep and lambs. If there is no change in total hay and forage acreage, pasture and hay yields will have to be increased about 35 percent—chiefly by greater use of fertilizer.

If the projected production requirements for 1975 were met solely through increases in area of cropland, an additional 150 million acres would be needed. But trends of the last fifteen years indicate that only about 25 million additional acres might be put to use. That means five-sixths of the job will have to be done by increasing yields, or by other advances in technology.

It's Simple Arithmetic!

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Heavy Chemicals

The imbroglio in the Middle East was still an important influence on world markets for nonferrous metals and other commodities. But markets last week continued to exhibit a reaction to the sharply higher world quotations which had set in at the height of the world crisis. Tin metal continued to slide off. Copper, lead and zinc, which held firm and unchanged in this country, were generally quieter abroad, and those foreign markets were considered stable. Mercury in this country was quiet, with stocks closely held.

A producer announced that effective January 1, anhydrous sodium sulfite will be increased by 25 cents per hundredweight. Monocalcium and tricalcium phosphates will be increased on that date as well. Other materials scheduled to go higher at that time are sodium silicates and most of the boron compounds.

Metallic sodium will be increased in tankcar quantities, effective December 10.

A preliminary report on September production of inorganic chemicals compiled by the Bureau of Census shows increases for all but soda ash, nitric acid and ammonium nitrate, in a list of ten selected chemicals.

Chlorine gas output was up 1 percent, hydrochloric acid production climbed 13 percent, and electrolytic caustic soda was up 9 percent. Phosphoric acid production jumped 10 percent.

An examination of the price structure for hydrochloric acid showed a generally better market position for that material in the southeast than had been the case in 1955.

The American Pulp and Paper Assoation reported production for the week ended November 10 at 98.8 percent of theoretical capacity, as compared with the revised figure of 100.6 percent for the previous week, and 101.8 percent for the corresponding week of last year.

Acid, Hydrochloric—Steel, chemical and neoprene output continued at high levels, and this situation continued largely responsible for heavy shipments of acid, particularly in the northeast and midwest.

Price for 20 degree Baume acid at Chicago, Cleveland, Ohio; Philadelphia, Buffalo, N. Y., and Pittsburgh, Pa., to mention some shipping points in the northeast and midwest, held firm at $30 per ton, tankcars, f.o.b. works, freight equalized.

The southeast price picture for hydrochloric acid showed improvement over levels in 1955, and at representative shipping points such as Anniston, Ala., Chattanooga, Tenn., and Belle, W. Va., acid was quoted at a uniform $22.50 per ton.

The more uniform price structure in the southeast was attributed to two key factors:—Producers of chlorinated hydrocarbons have upgraded byproduct muriatic by installing ion exchange filters, and a former open-market producer has since made its supply of acid captive, taking a large quantity off the market.

Texas shipping points also showed a greater mutual conformity in pricing, when compared with levels in early 1955. Such points as Velasco, Freeport, Dumas, and Fort Worth quoted material at $19.69 per ton, tankcars.

Other prices in various areas for 20 degree acid were:—St. Louis, Mo., $27 per ton; Wichita, Kan., $21 per ton, and Loving, N. M., $18 per ton, tankcars, f.o.b. plant.

Acid, Nitric—Business volume continued large last week, as there was no letup in sight for demand from steel fabricators, organic chemical manufacturers, and other users.

Stainless steel inquiry for nitric acid continued heavy, as producers of stainless were hard pressed trying to fill incoming orders.

Acid, Sulfuric—Demand continued active from a number of end uses, including steel, rayon, pigments, petroleum, and general chemicals. Fertilizers such as superphosphate and ammonium sulfate continued weak, resulting in low demand from makers of these products.

Steel output last week was estimated at 2,472,000 tons, or 100.4 percent of capacity by the American Iron and Steel Institute.

This compares with actual output of 2,463,000 tons, or 100.1 percent of capacity the previous week, and 2,394,000 tons, or 99.2 percent of 1955 capacity the corresponding week in 1955.

The following figures are estimates of United States use of sulfuric acid (basis 100 percent) in 1954 and 1953, as reported by the Bureau of Mines, in short tons:—

Industry	1954*	1953
Fertilizers: — superphosphate	4,060,000	4,050,000
Ammonium sulfate	1,329,000	1,150,000
Chemicals	3,880,000	4,000,000
Petroleum refining	1,770,000	1,780,000
Inorganic pigments	1,300,000	1,300,000
Rayon and film	620,000	670,000
Iron and steel	850,000	1,010,000
Other metallurgical	220,000	220,000
Industrial explosives	400,000	420,000
Textile finishing	30,000	30,000
Miscellaneous†	650,000	670,000
Total	15,100,000	15,300,000

*Preliminary.
†Includes estimated gross acid going into military explosives.

Price Trends

Advanced

Tin, ½c. per lb.

Reduced

Stannic oxide, 5c. per lb.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
102.34	102.34	102.32	100.45

For Current Prices see Page 9

Calcium Phosphates—A producer has announced increases in price for monocalcium and tricalcium phosphates, to go into effect on spot and contract January 1.

Effective January 1, anhydrous monocalcium phosphate will be advanced to $9.25 per 100 pounds bags, carlots or truckloads, f.o.b. works, freight equalized, and $9.75 per cwt., less carlots or truckloads, same basis, an increase of 30c. per cwt.

Hydrated monocalcium phosphate will rise to $7.20 per cwt., bags, 10,000-pound lots or more f.o.b. works, freight equalized, and $7.70 per 100 pounds, smaller lots, same basis, an increase of 30c. per 100 pounds.

Tribasic precipitated NF calcium phosphate will be advanced to $9.25 per cwt., bags, carlots or truckloads, f.o.b. works, freight equalized and $10 per 100 pounds, smaller lots, same basis, up 50c. per cwt.

Chlorine—Most plants were reported running right up to capacity in attempting to keep up with incoming orders. Demand continued strong all through the end use pattern.

Soda Ash—Demand for dense ash was considered about average for the time of year. Orders from the glass industry were not too heavy, although a pickup was noted for flat glass for automobile production.

Light ash continued to move in good volume to makers of aluminum, phosphates, paper and chemicals. Concensus was that business had returned to normal following the October 1 price increase.

Soda, Caustic—Buying interest was well sustained from paper and pulp manufacturers. Caustic manufacturers have been encouraged by the way the rayon industry has snapped out of the doldrums which beset it during the summer.

October shipments of rayon and acetate filament yarn and staple totaled 101,600,000 pounds, an increase of 17½ percent over September but slightly below the 102,800,000 pounds shipped in October, 1955, according to the Textile Economics Bureau.

October shipments were made up of 100,100,000 pounds for domestic use and 1,500,000 pounds for export. High tenacity shipments in October gained 2½ percent, to 29,900,000 pounds, but were 19½ percent less than October, 1955, levels.

Output of all man-made fibers in the United States during the third quarter declined 3½ percent from the second quarter, to 384,600,000 pounds.

Sodium Phosphates—A strike at the works of a producer caused a tightening in supply, and a consequent increase in business for other producers. Current reserves were such that consumers could get what they needed without delay.

Sodium Sulfite—Anhydrous sodium sulfite will be increased 25c. per hundred

pounds across the board, effective on spot and contract January 1, 1957.

At that time sulfite for industries other than the paper industry will list at $3.50 per hundred pounds, bags, carlots, f.o.b. works, and $4 per cwt., truckloads, same basis.

Stannic Oxide — Prices were lowered 5c. per pound, to $1.11½ to $1.12½ per pound, spot.

Sulfur—The following figures represent production, shipments and stock of sulfur of a purity of 97 percent or greater during specified periods in the United States, in tons.

Sulfur	*August*	*July*
Native production	597,699	621,130
Shipments	478,181	473,640
Sales*	454,911	457,621
Stocks†	3,636,730	3,493,942
Recovered production	42,500	43,400
Shipments	39,385	39,150
Sales*	42,699	40,099
Stocks†	115,047	115,246

*Calculated from production and change in stocks during the period.
†Producers' stocks at mines or plants, in transit, and in warehouse at end of period.

Nonferrous Metals

Aluminum — Domestic production of primary aluminum in September totaled 132,316 short tons, according to the Bureau of Mines. This was 13 percent below the record output of 151,624 tons produced in July.

Industry, however, was fast approaching normal operations since the strike, which occurred in August. Production loss due to the strike was estimated at 74,000 tons. Despite the effects of the strike, September production, because of new capacity now in operation, exceeded that of September, 1955.

Copper—The Middle East crisis continued to have a firming influence on the market. Domestic producers held the posted price at 36c. per pound, delivered, for electrolytic.

Selenium—Production of metallic selenium compounds in September 1956 was 87,126 pounds of contained selenium, according to reports received from selenium producers by the Bureau of Mines.

The output was 23.9 percent less than the August production of 114,551 pounds, but was 22.8 and 24.5 percent above the average monthly production in 1955 and 1954, respectively. Shipments in September 1956 totaled 94,511 pounds of contained selenium, compared with 102,550 pounds shipped in August.

General selenium imports to the United States in August were 38,037 pounds. Imports of selenium from Canada in August totaled 27,520 pounds compared with July imports of 12,057 pounds, according to statistics furnished by the Department of Commerce.

Silver—Bullion was unchanged, quoted on Friday at 91⅜c. per ounce, spot.

Tin—Straits metal was quoted at $1.10 per pound, spot, on Friday.

Zinc—The following figures, in tons, indicate total slab zinc smelter output and stocks, according to American Zinc Institute.

Production	*October*	*September*
Special high grade	30,360	29,633
High grade	13,372	12,936
Intermediate	2,502	1,697
Prime western	47,259	45,969
Total	93,493	90,235

Stocks	*October*	*September*
Special high grade	29,558	32,764
High grade	5,924	9,110
Intermediate	1,539	1,952
Prime western	51,789	58,339
Total	88,810	102,165

Mineral Resources Rules Are Issued by Government

The Bureau of Land Management last week issued proposed regulations to carry out the intent of public law 359, which opens up about 7.2 million acres of public lands to development of their mineral resources.

The lands are located in seventeen states and Alaska, and are areas which have been set aside, some for as long as forty years, for possible water and power development. The public has been given thirty days in which to submit written comments before final action is taken on the regulations.

Philadelphia Chemists Plan Party

The Chemical Club of Philadelphia will hold its annual Christmas party December 10 at Palumbo's, Eighth and Catherine streets, Philadelphia. The program for the evening will include dinner and a show.

Olin Mathieson Appoints Aluminum Fabrication Head

Albert J. Berdis has been appointed a corporate vice-president of Olin Mathieson Chemical Corporation, New York, in charge of aluminum fabrication. Mr. Berdis, who has been associated with United States Steel Corporation for the last 26 years, was responsible for designing, building and beginning the operation of U. S. Steel's vast Fairless Works in Morrisville, Pa.

At Olin Mathieson he will be responsible for all aluminum fabricating, including the operations of the new 60,000-ton-a-year rolling mill now under construction at Omal, Ohio; the Olin Mathieson extrusion plant in Gulfport, Miss., and fabricating facilities on the West Coast.

Quaker State Mgr. Retires

H. C. Eaton, for seventeen years manager of the wax division of Quaker State Oil Refining Company, Oil City, Pa., has retired. Mr. Eaton had been connected with various phases of the Pennsylvania oil business for more than forty-five years.

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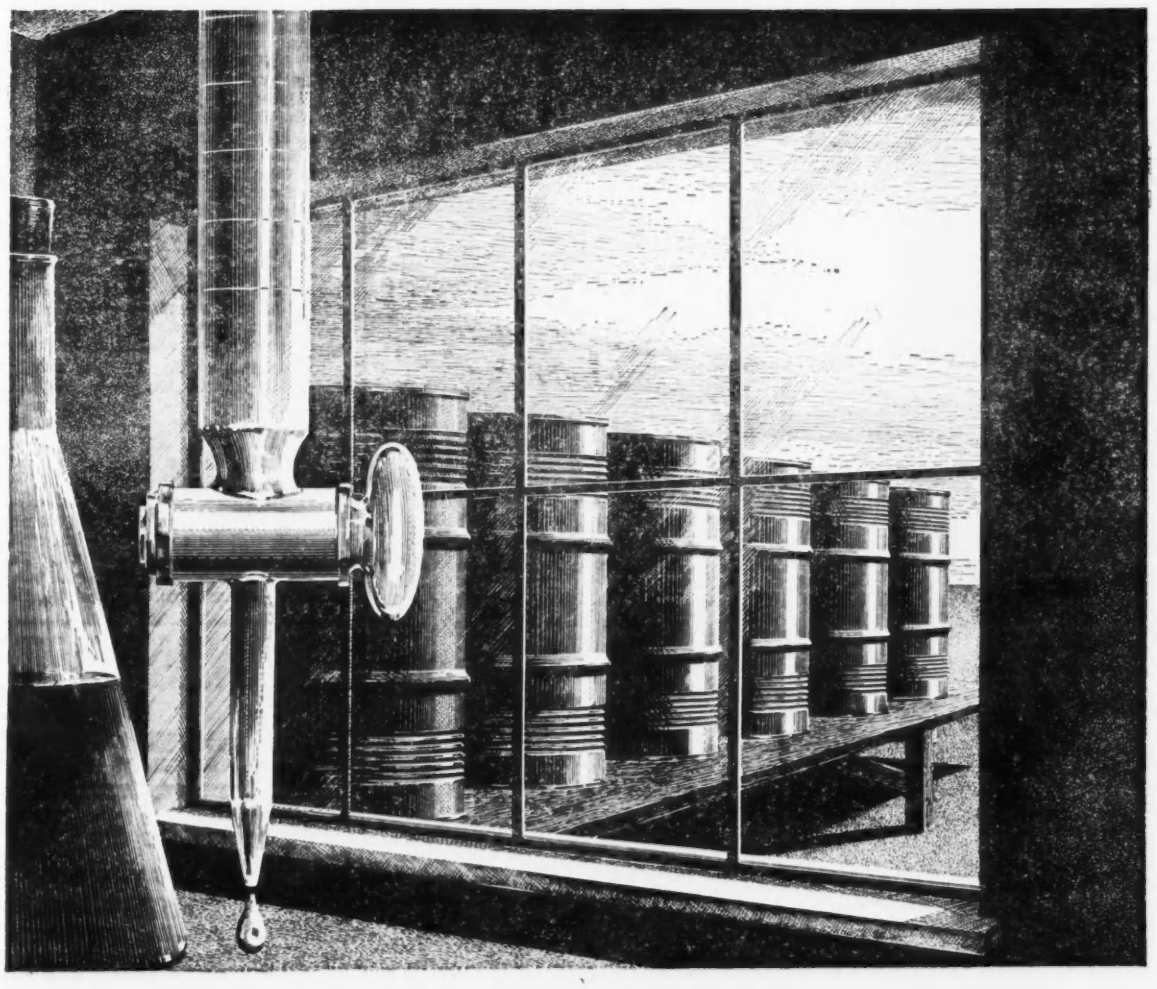

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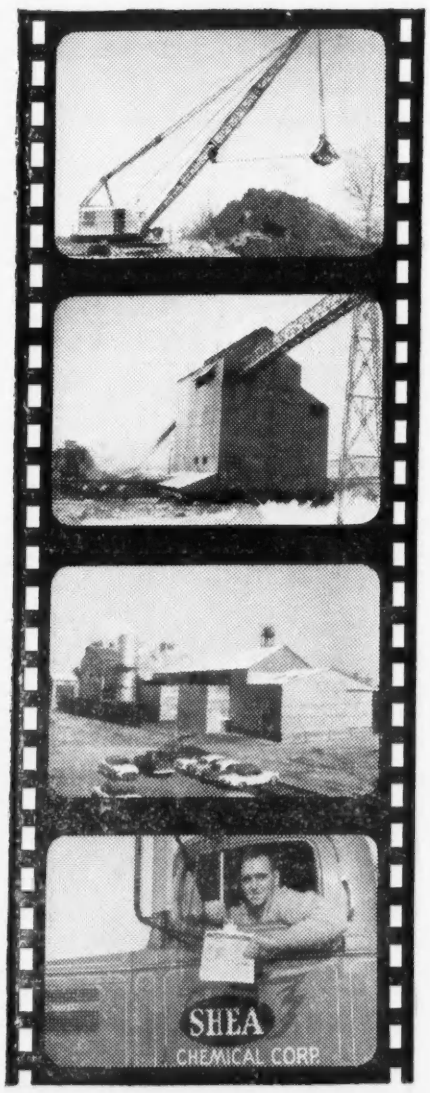

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Renegotiation Rules Take On Final Form

—Continued from page 7

government or accrued in fiscal years ending after June 30, 1956, from sales of articles or services provided for in the law.

The new commercial exemption contemplates two separate procedures:—

1. One part of the exemption, that relating to standard commercial articles, is self-executing, in that it is to be applied by the contractor himself without application to the board. For exemption under this provision, an article must be customarily maintained in stock by the contractor or offered for sale in accordance with a price schedule regularly maintained by him, and at least 35 percent of the aggregate dollar sales of the article by the contractor during his fiscal year must be sales not subject to the renegotiation law.

2. The other part of the exemption relates to standard commercial classes of articles, to standard commercial services, and to articles for services which are "identical in every material respect" with a standard commercial article or service. This part of the exemption is not self-executing. In order to obtain exemption for any such articles or services, the contractor must file an application known as the Application for Commercial Exemption. No printed form is prescribed for this application, but the regulations specify in detail the information and data that must be included. If the board does not deny application within three months after it is filed, sales in question are exempt, except that in the case of a standard commercial class of articles a period of six months after filing is provided.

Specific provision is made whereby the contractor may formally waive the exemption, in whole or in part, for any articles or services. As in the past, neither the exemption nor a waiver of the exemption is effective beyond the fiscal year with respect to which such action is taken.

Concurrently with its new regulations, the board also extended until February 1, 1957, the time of all contractors with fiscal years ending on July 31, 1956, or August 31, 1956, to file an application for Commercial Exemption, or a financial statement, as required by the act.

New financial statement forms to be used for all fiscal years ending after June 30, 1956, will be available for distribution shortly. Since contractors on a July 31 or August 31 basis would have too little time to file such forms and exemption applications, a blanket extension of time has been provided for all such cases.

Contractors having less than $1 million of renegotiable sales in any fiscal year ending after June 30, 1956, are no longer required to file a financial statement with the board, but may do so in order to obtain a complete discharge for any such year twelve months after filing. This is also true of agents or brokers with renegotiable sales under $25,000.

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Jobs & People

Abbott Laboratories, North Chicago, Ill.—**Herbert S. Wilkinson,** vice-president and director of sales for Abbott, has been named program chairman for the 1957 fall conference of the Northwestern University Institute for Management.

American Potash & Chemical Corporation, Los Angeles — **Charles Field** has joined American Potash as formulations chemist at its Los Angeles plant. **James A. Smith** has been named personnel supervisor of the Los Angeles main office.

Archer - Daniels - Midland Company, Minneapolis, Minn.—**Leslie J. Perrine** has joined ADM as a technical sales engineer working out of its Los Angeles branch.

Bakelite Company, a division of Union Carbide & Carbon Corporation, New York—**Robert F. McAuliffe** has been named technical representative for Bakelite's molding materials division in Chicago.

Barrett Division, Allied Chemical & Dye Corporation, New York—**Roger E. Caffier** has been appointed chemical sales representative for Barrett in Rhode Island and southern Massachusetts.

Carbide & Carbon Chemical Company, a division of Union Carbide & Carbon Corporation, New York—**Robert W. Winters** has joined Carbide's Crag agricultural chemicals sales department as a technical representative.

Celanese Corporation of America, New York — **Albert Schlage** has joined the Celanese product development department.

Diamond Black Leaf Company, Cleveland, Ohio—**Darl E. Snyder** has been made eastern district manager of Diamond Black Leaf.

Dow Chemical Company, Midland, Mich.—**Gordon B. Thayer** has become plastics specialist on Dow's plastics technical service staff.

Enterprise Paint Manufacturing Company, Chicago—**Leonard S. Vincent** has been elected to the newly-created post of vice-president in charge of trade sales for Enterprise Paint.

Glidden Company, Cleveland, Ohio—**Joseph C. Sherwood** has been appointed technical service director of Glidden's northwestern industrial department.

Monsanto Chemical Company, St. Louis, Mo.—**James J. Kelley** has been promoted to assistant district sales manager for the New York district of Monsanto's consumer products division.

Reichhold Chemicals, Inc., White Plains, N. Y.—**William T. Marshall** has been named RCI district sales manager at New Orleans, La.

Shell Chemical Corporation, New York—**John F. Kroeger,** a technical salesman in Shell Chemical's Chicago district, has become manager of the Newark, N. J., district, and **John G. Dickerson,** a senior technical salesman in Detroit, Mich., has been appointed manager of the Boston district.

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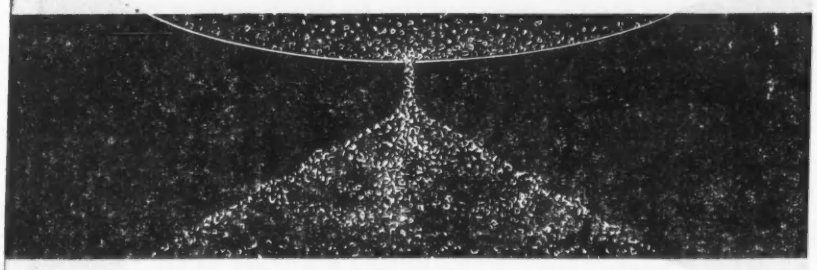

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Heyden, Newport

—Continued from page 3

board of Newport. The new shares of Heyden common stock will be listed on the New York Stock Exchange on the closing, now scheduled for January 2.

If the plan is consummated, the 31,000 shares of Newport preferred stock will be called for redemption in January.

Beneficial Integration

"Heyden, major producer of pentaerythritol, formaldehyde and other chemicals important in the protective coatings and plastics industries, will gain a definite advance in the integration of its position from the acquisition," Mr. Askin said.

"We are convinced that basic chemicals obtained from wood and new products derived therefrom fit naturally into our expansion plans. Newport is a pioneer producer of premium grades of refined tall oil and tall oil products. Newport is the second largest producer of naval stores in the country. Newport's expanding line of fine chemicals from wood sources will also complement Heyden's products offered to the pharmaceutical, food, cosmetic and other industries," Mr. Askin added.

"The combination will produce a company with a sufficiently broad base of sales and earnings to permit consideration of important manufacturing ventures of a growth nature which, because of their size, are not as available for either Heyden or Newport, separately," said Mr. Schlesinger, emphasizing the mutual advantages of combined sales and research activities.

"Based on these favorable factors, the management and the boards of both companies believe that the combined enterprise has a substantial growth and earnings future."

"After redemption of Newport's preferred stock and the distribution of Heyden common stock to Newport stockholders, Newport will be dissolved," Mr. Askin and Mr. Schlesinger said.

"The business of Newport Industries will continue under its present operating management either as a division or as a wholly-owned subsidiary of Heyden Newport. The Heyden Newport board will be enlarged to include nine members of the present Heyden board and seven members of th Newport board."

1956 Net Up for Both

Heyden earnings for the first nine months of 1956 were 78 cents per share on the 1,064,526 common shares outstanding, after preferred stock dividend requirements. This represented an increase over per share earnings 68 cents in the like period of 1955 on the 1,085.526 common shares then outstanding. Heyden's net sales for the first nine months of 1956 were approximately $18,250,000. Heyden net sales in the like period of 1955 were $18,051,780.

Newport's nine months earnings for 1956 were $1.16 per share on 672,319 shares of common stock outstanding after dividend requirements on the preferred stock. This compared with $1.10 per share earnings on the 633,788 common shares outstanding in the like period of 1955. Net sales for the first nine months of 1956 were $16,507,921 for Newport. In the like period of 1955 Newport net sales were $16,069,552.

Heyden's plants are located in New Jersey, New York and Texas. Newport's are in Florida, Alabama and Louisiana.

Heyden's joint venture with Monsanto Chemical Company for the manufacture of methanol, Heyden's principal raw material, although delayed by engineering difficulties for many months, is now beginning to approach capacity," Mr. Askin said. "It is expected to make a substantial addition to earnings in 1957."

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Water Pollution Violators Faced with PHS Action

Public Health Service last week threatened to take formal action against several alleged violators of the water pollution control law engaged in oil well operations in Arkansas.

They are accused of discharging matter contributing to pollution of interstate waters of the Corney Drainage System, which originates in Arkansas, and endangering the welfare of persons in Louisiana.

In a notice appearing in the *Federal Register*, November 10, PHS announced that the persons named in the complaint have failed to initiate action to abate the pollution after being given a second notification of pollution, and a public hearing will be held looking to development of measures to bring the violators in compliance with the law.

The formal notice of the agency marks the first time that it has moved to the point of calling a public hearing to bring the compulsory features of the law into play.

FMC Plans to Purchase Oil Center Tool Company

Food Machinery & Chemical Corporation, San Jose, Calif., plans to acquire all the outstanding stock of Oil Center Tool Company, Houston, Tex.

Under the agreement, Oil Center stockholders would exchange their shares for an equal number of shares of FMC. The transaction is subject to approval by Securities and Exchange Commission.

Europe, Middle East

—*Continued from page 4*

what some call 'cheap' foreign oil, would be able to find plenty to meet all peace and wartime requirements for many years to come. You argue, furthermore, that if you are not permitted to meet the peacetime requirements of the country how can you be expected suddenly to expand output to meet emergency requirements?

"Despite the merit of this point of view, it is my considered opinion that over the long-term—say the next thirty years—the demands of the world for oil will require that we tap more effectively the resuroces of countries other than the United States. This is not meant to say that we shall slack up in providing incentives for further exploration and discovery in the United States. Certainly, we ought to do the best we can at home to discover and produce petroleum within the limits of wise, long-term conservation.

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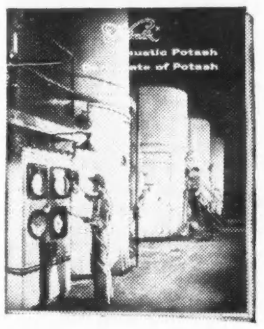

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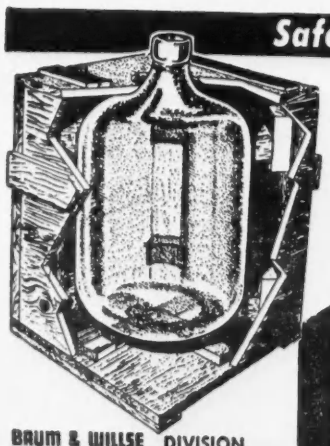
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Textile, Leather Chemicals

Consuming demand for textile and leather chemicals continued at a good pace last week. While the bulk of orders were for prompt delivery, steady improvement was noted in buying interest for forward requirements. The price structure remained on a firm basis for most materials. Egg yolk was stronger and raised 4 cents per pound. Flake egg albumin was slightly lower, while the technical grade was steady and maintained at former levels. Trading in potato starch continued quite active, with users placing contracts for delivery throughout 1957. Output has been increased with grinders operating at capacity to cover existing contracts. Other sizing materials also were in steady request. Users of tapioca flour continued to substitute Siamese flour for Brazilian. Keen competition in Siamese grades at primary sources continued to unsettle medium and firm bids could have shaded asking prices, while top grades were unchanged and well held. Sago flour was in light for spot delivery. Arrival of replacements has been delayed due to the closing of the Suez Canal, steamers were compelled to take the longer route around Cape Horn.

Trading in tanning materials continued spotty, chiefly for nearby shipments. All materials were quotably unchanged, reflecting the steadiness of primary markets.

Shipments of rayon and acetate filament yarn and staple and tow totaled 101,600,000 pounds in October, an increase of 17½ percent over September but slightly below the 102,800,000 pounds shipped in October, 1955, according to the Textile Economics Bureau. October shipments were made up of 100,100,000 pounds for the domestic market and 1,500,000 pounds for export. Imports of rayon staple amounted to 6,210,000 pounds in September, slight increase from the 5,916,000 pounds in August. Imports in the first nine months of 1956 totaled 69,152,000 pounds, or less than half the 141,345,000 pounds for the corresponding period of 1955.

PriceTrends

Advanced
Egg yolk, 4c. per lb.

Reduced
Egg albumin, flake, 1c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
108.55	108.55	108.27	105.33

For Current Prices see Page 9

Chemicals

Bichromates—This market remained firm and quotably unchanged. Steady consuming demand was noted for prompt delivery and against former contracts.

Sodium Acetate—Prices were without change and well held. Demand was moderate, chiefly for prompt delivery.

Sodium Hydrosulfite—Improved trading was reported for spot and later delivery. Quotations were maintained at former levels.

Sulfonated Oils—Consumers stepped up demand for prompt needs. Prices were unchanged and steady.

Sizing Materials

Corn Dextrin—This market was without change and steady. All grades were maintained at prevailing levels. Demand continued in good volume for prompt needs. Gum was held at $9.28 per 100 pounds, paper bags, carlots, New York delivery; light canary, $9.02; dark canary, $9.12, and white, $8.86, same basis. Smaller lots were 15c. per 100 pounds higher.

Corn Starch—Active demand was reported for all grades for prompt delivery. Prices were unchanged and firm. Pearl was quoted at $7.27 per 100 pounds, paper bags, carlots, New York, and powder $7.39, same basis. Less carlots were 15c. per 100 pounds higher. Visible corn supply was lifted 6,819,000 bushels to 64,100,000 bushels for the week ended November 9, against 32,317,000 bushels for the same time last year, according to the Chicago Board of Trade.

The government crop report indicated the corn crop at 3,412,183,000 bushels as of November 1, compared with 3,369,102,000 bushels the previous month and 1955 production of 3,241,536,000 bushels. The 10-year (1945-54) average is 3,084,389,000 bushels. This is second largest corn crop on record, according to government officials.

Egg Albumin—Steady tone continued in technical grade, which was maintained at $1.08 to $1.10 per pound, spot as to quantity. Flake was easy and quoted at $1.69 to $1.71 per pound, and powder, $1.73 to $1.75 per pound, spot according to quantity. Trading was quite active for spot and later requirements.

Egg production in October totaled 4,818 million pounds, against 4,435 million in September and 4,631 million in October last year. Output during January-October inclusive amounted to 50,754 million pounds, compared with 49,832 million for the same period last year and 10 year average of 48,716 million.

Potato Starch—Improved buying interest was reported for prompt and future delivery. Trading was quite active at 6¼c. per pound, carlots, f.o.b. Maine and 6c. for delivery south of Virginia. Contracts have been booked for shipment up to late next year. Good demand was noted for spot needs. Stocks on spot were well held at 8¼c. to 9¼c. per pound, exwarehouse, as to quantity. The Idaho market remained steady at 6¼c., carlots, f.o.b. mills and 5½c. for delivery to eastern points.

The potato crop was forecast at 252,167 100 pound bags as of November 1 by the Department of Agriculture, against 242,167 the previous month; 1955 production of 227,046 and 10 year average of 226,360.

Tapioca Flour—Keen competition at primary sources continued to keep replacements of low grades of Siamese flour unsettled. Offers were liberal of medium ranged from 5¼c. to 5¾c. per pound, carlots exdock, prompt shipment as to quality. AAA remained in good demand and was held at 6½c., same basis. Interest in Brazilian flour lagged and market was merely nominal at 10c to 10½c. per pound, carlots, exdock, depending upon seller and quantity.

Tanning Materials

Mexican tanners in the first 6 months of 1956 processed 2,333,328 cattle hides and calfskins; 1,309,700 goat, kid, and lamb skins; and 850,000 pigskins, totaling 4,493,028.

Output for the entire year 1955 approximated 3.5 million cattle hides and calfskins; 2.2 million goat, kid, and lamb skins; and 1,143,000 pigskins. Of the 1955 quantities, 884,730 cattle hides and 463,276 pigskins were of foreign origin. Hide and skin imports are expected to decline by about 20 percent. Tanneries in operation total 1,036, about 500 of which are of any substantial size. A total of 6,960 workers are employed.

Chestnut Extract—Consuming inquiry was moderate, with actual trading spotty and confined to nearby shipment. Quotations were unchanged. Solid extract guaranteed 60 percent was quoted at 9⅛c. per pound, carlots, exdock, plus duty, prompt shipment and powdered, 70 percent, 10⅝c., same basis.

Cutch—Shipments continued unchanged and firm at 8½c. per pound, carlots, exdocks, plus duty. Offerings continued light.

Mangrove Bark—Trading in replacements was spotty and confined to nearby. All grades were maintained at former levels. African bark was quoted at $66 per ton, exdock, prompt shipment; Colombian, $58 per ton, and Ecuadorian, $55, same basis.

Quebracho Extract—Trading was confined to nearby shipment. Shipments were quotably unchanged and well held. Solid ordinary guaranteed 63 percent tannin was quoted at 11 21/32c. per pound, exdock, plus duty and clarified 64 percent 12 23/64c., same basis.

Valonia—Buying interest was reported limited and confined to nearby shipment. Primary market was quotably unchanged and steady. Beards were unchanged at $86 per ton, carlots, exdock; cups, $64 per ton, same basis and extract, 9¾c. per pound, exdock, plus duty.

Aliphatic Organics

A major producer announced a 2½ cents per gallon price increase across the board effective January 1 on both spot and contract orders for methanol. Effective immediately, a leading producer reduced the base price of sodium lauryl sulfate by ½ cent per pound. At the same time, contrary to a pronounced trend indicated through the past five months, the latter company reduced drum prices by 2 cents per pound, in effect reducing drum differentials by 1½ cents per pound. Differentials on most items moving in the aliphatic chemicals market have been increased recently. Many producers effected ½ cent increases on differentials last July 1. Most of those who passed on that contract date followed suit in this respect on October 1.

Molasses rose an additional 1 cent per gallon at New Orleans in an unsettled market. There supply was adequate, demand slow to moderate. Buyer resistance appeared in the form of feed mixes in which content of molasses was reduced by as much as 50 percent.

Drought conditions supported good to moderate demand for feed molasses in Texas, despite additional price increases there.

Molasses was unchanged in price at New York, where demand was moderate and supply adequate.

Formaldehyde was moving in heavy volume in a thriving market. Several projects were under way to set up new production facilities or expand existing plant capacity in the race to keep up with the fast growth of demand. Phenolic and urea type resins were drawing heavily and at an accelerating pace on available supply of formaldehyde. Output was running well ahead of the rate maintained through 1955. It was presently far ahead of an average of 100 million pounds per month.

Ethyl chloride was firm. Particularly heavy demand for use in manufacture of tetraethyl lead for gasoline now constituted perhaps as much as 90 percent of the whole market, but good volume was noted in terms of sales for use in manufacture of ethyl cellulose by a process in which ethyl chloride is reacted to yield the ethylene intermediate.

The outlook for ethyl chloride was governed by a number of developments in prospect that would substantially increase output of tetraethyl lead and by the currently limited availability of ethylene. The latter was being drawn off in heavy volume for use in the increasing manufacture of polyethylene resins. The shortage was serving last week to curb ethyl chloride production.

Glycerine was not coming back as strong as producers had hoped. Additional production facilities were in the works at a time when inventories were rather heavy. The gradual diminution effected in stocks through last summer was abruptly reversed in September, when the available supply was increased by nearly 2.7 million pounds. The additional surplus appeared both as excess of production over domestic consumption and as excess of imports over exports.

The crude glycerine market was definitely sluggish. Prices have held steady since early October, following a series of declines, but there was a heavy excess of material on hand.

Methanol continued to show great market strength. Long-term growth factors were toning up the trade, as well as recent seasonal gains in sales of material for use in antifreeze compounds and through outlets accountable to automotive manufacture. Producers were considering expansion plans that would add 30 million gallons per year capacity.

Use in vapor metal degreasing was playing the chief role in holding up volume of trade in trichloroethylene at a satisfactory level.

Ethyl Chloride—This market was firm last week, demand holding up very well.

Tetraethyl lead manufacture continued to provide the mainstay for trade in ethyl chloride, perhaps as much as 90 percent of the market. A steady secondary market was supported by manufacture of ethyl cellulose by a process using ethyl chloride as a reactant yielding the ethylene intermediate.

PriceTrends

Advanced
None.

Reduced
Sodium lauryl sulfate, ½c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
130.43	130.43	130.38	130.73

For Current Prices see Page 9

The outlook was obscured by several rapidly changing factors.

For one thing, major new tetraethyl lead production facilities were under development on the west coast. It was not known whether these projects would include plant facilities for production of ethyl chloride or whether they would provide new markets for producers already in the field.

At present, availability of ethylene was limited in view of heavy demand for it for production of ethyl chloride and polyethylene resins. This shortage was keeping a lid on ethyl chloride production.

Formaldehyde—Trade was reported in very heavy and growing volume last week. Prices were said to be on a firm footing.

Despite increasing production quotas at a level well above 100 million pounds per month, producers were moving swiftly to build new plant facilities. A number of major factors were expanding capacity of existing facilities or building additional plants at new sites.

The ambitious expansion plans of the industry were deemed to be fully justified if producers were to keep pace with the fast growth of demand for use of formaldehyde in manufacture of phenolic and urea type formaldehyde resins and increasing consumption through diverse other outlets.

The industry produced 108,512,131 pounds of formaldehyde in August, most recent month for which Tariff Commission figures were available. That brought the cumulative total for the first eight months of the current calendar year to 880,559,541 pounds, including a monthly low of 86,138,984 pounds produced in July, when the steel strike was on, and a high recorded in March, of 121,905,571 pounds. The twelve month total for calendar year 1955 was 1,195,459,108 pounds.

Glycerine—The market was not shaping up as well as producers had hoped. Additional production capacity was still being added at a time when inventories were burdensome and were still mounting steadily. Demand was strong, in an absolute sense, but there was a substantial excess of domestic plus imported material with relation to domestic consumption plus exports.

The gentle diminution of stock excess that had been maintained through the summer was reversed abruptly in September, according to figures recently made available by the Association of American Soap and Glycerine Producers. In that month, production amounted to 19,242,000 pounds, while imports added another 2,026,000 pounds, putting a total of 21,268,000 pounds of additional material on the domestic market (all figures in terms of 100 percent glycerine basis). At the same time, apparent domestic consumption, 17,761,000 pounds, and exports, 849,000 pounds, removed only 18,610,000 pounds from the domestic market.

The deficiency of disappearance, overall, compared to addition of available material, was thus a net 2,658,000 pounds in September. Accordingly, stocks rose from 63,234,000 pounds at the beginning of the month to 65,892,000 pounds at the end of the month.

Again on a 100 percent glycerine basis, the cumulative figures through the first nine calendar months of this year and last were:—

	1956 lbs.	1955 lbs.
Production	183,994,000	161,740,000
Imports	12,749,000	21,353,000
Total added	196,743,000	183,093,000
Domestic disappearance	174,849,000	174,209,000
Exports	7,978,000	7,255,000
Total removed	182,827,000	181,464,000
Excess added	13,916,000	1,629,000
Stocks Jan. 1	51,977,000	42,359,000
Stocks Sept. 30	65,892,000	43,988,000

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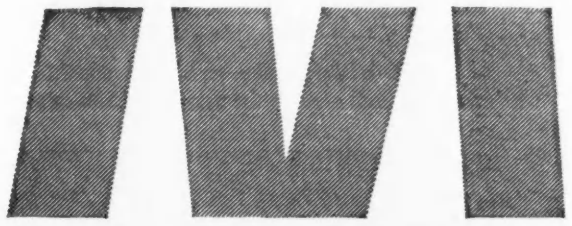

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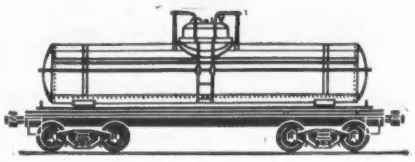

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mer plus potential for expanded markets would restore balance to this market during 1957. They pointed out that stocks, as heavy as they were, constituted only about 3.2 months' consumption at current rates and that there were factors that made it desirable for the industry to maintain inventories sufficient for two to three months' supply.

These sources believed that synthetic prices were now firm and that no further revision would occur in this calendar year.

Dealers in crude were less optimistic. They reported that trade in crude was poor, that heavy imports of Argentine crude were showing up here and that supply was far ahead of demand.

While quotations for both soaplye and saponification material had stabilized at lows established at the beginning of October, traders were keeping a wary eye on synthetic prices. Crude prices would be further reduced in anticipation of further synthetic decline, they said, if such further decline were to appear imminent. There had been rumors of price changes for several weeks, but all major producers denied that they were contemplating any or that, indeed, there was any foundation to justify further price revision at this time.

For the present, then, crude prices could be considered firm, since dealers regarded current quotations on crude as low in relation to current synthetic prices.

Methanol—A major producer announced a price increase of 2½c. per gallon across the board effective January 1 on both spot and contract. Under the new January 1 price schedule, on a delivered basis, tankcars will be quoted at 32½c. per gallon, tankwagons at 35½c. per gallon, drum carlots at 48½c. per gallon and less carlot drum quantities at 55½c. per gallon.

Molasses—The price range for blackstrap at New Orleans climbed another 1c. per gallon the week before last. Latest quotations available from the Department of Agriculture listed this material at from 25c. to 26c. per gallon, with most sales reported at 25c. per gallon. Prices in effect in the previous week ranged from 24c. to 25c. per gallon.

Demand at New Orleans was slow to moderate. The market was unsettled, supply adequate. It was noted that continued price resistance was manifest in feed mixes in which molasses content had been reduced by as much as 50 percent.

Through November 8, sales of Louisiana blackstrap to the Louisiana Sugar Exchange aggregated 133 tankcars. Prices ranged from 22c. to 24c. per gallon.

Demand for feed molasses in Texas, despite additional price increases, was good to moderate. Continuing drought conditions were holding up that market.

The price remained unchanged at New York at 25c. per gallon. There supply was adequate and demand moderate.

Sodium lauryl sulfate — A major producer effected immediately a ½c. per pound reduction in the base price late last week. At the same time, quotations on drumlots were reduced by 2c. per pound, in effect reducing drum differentials by 1½c. per pound.

Revised quotations, on a delivered basis, were 18c. per pound for sodium lauryl sulfate in tanklots, 19c. per pound for carlots in drums and 20c. per pound for less carlots in drums.

The reduction in drum differentials marked a reverse in a widespread practice. In general, producers of aliphatic chemicals had been increasing differentials on numerous items in view of increased costs of steel and other cost factors. Many increases were effected last July 1 as the steel strike got underway. Most of those who had passed the July 1 contract date followed suit in this respect on October 1.

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Salk Exports for Quarter More Than Half of Quota

More than 4 million cubic centimeters of Salk polio vaccine have been licensed for export since October 1, the Bureau of Foreign Commerce has announced. This is more than half of the fourth quarter export quota of 7 million cc's established by the bureau.

The quantity licensed includes 130,500 for Switzerland and 1,035,000 for Sweden to enable these countries to initiate immunization programs. Sweden has a history of polio incidence which is among the highest in the world. The rest of the vaccine licensed thus far is for other countries as follows:

Argentina, 2,480,757 cc's; Brazil, 31,556; Costa Rica, 93,186; Finland, 120,303; Guatemala, 14,400; Iceland, 4,050; Israel 48,150; Norway, 15,453; Panama, 27,000; Uruguay, 54,000; and Venezuela, 2,700 cc's.

BFC said that under the criterion established to assure the most effective distribution of the export quota, priority is given to those countries which are most urgently in need of the vaccine and which maintain adequate immunization programs.

'Albamycin,' Penicillin Test Shows Synergistic Action

A combination of the two antibiotics, penicillin and "Albamycin," has resulted in a new drug entity with greater potency than either of its components, according to Upjohn Company, Kalamazoo, Mich.

The antibiotic combination is available in capsules under the name "Alba-Penicillin." "Albamycin" is a new antibiotic for use against bacteria which has developed resistance to other chemotherapeutic drugs.

The new combination kills greater numbers of bacteria faster than the same or twice the concentration of either antibiotic alone, Upjohn clinical research studies indicate.

"Alba-Penicillin" is reported to delay the development of resistant staphylococcus. Laboratory experiments indicate that staphylococcus aureus remains sensitive to "Alba-Penicillin" long after it has become resistant to penicillin and to "Albamycin."

A wider range of activity than penicillin or "Albamycin" alone is also attributed to "Alba-Penicillin." It is indicated primarily in mixed infections where the invading organisms are more sensitive to the combination than to the two drugs separately. Upjohn scientists said Alba-Penicillin is truly synergistic in some cases.

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H-13

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High tack	Contribute adhesion and cohesion.
High Viscosity Index	Minimum change of viscosity with temperature.
Uniformity	Uniformity of INDOPOL Polybutenes helps finished products maintain uniformity and high quality.
Compatible	Compatible with many solvents, resins, gums, rubbers, waxes and asphalts.
Resistant to moisture	Contribute moisture-proof and vapor-resistant characteristics.
Good lubricant	At low and intermediate temperature, similar to highgrade, non-additive petroleum oils.
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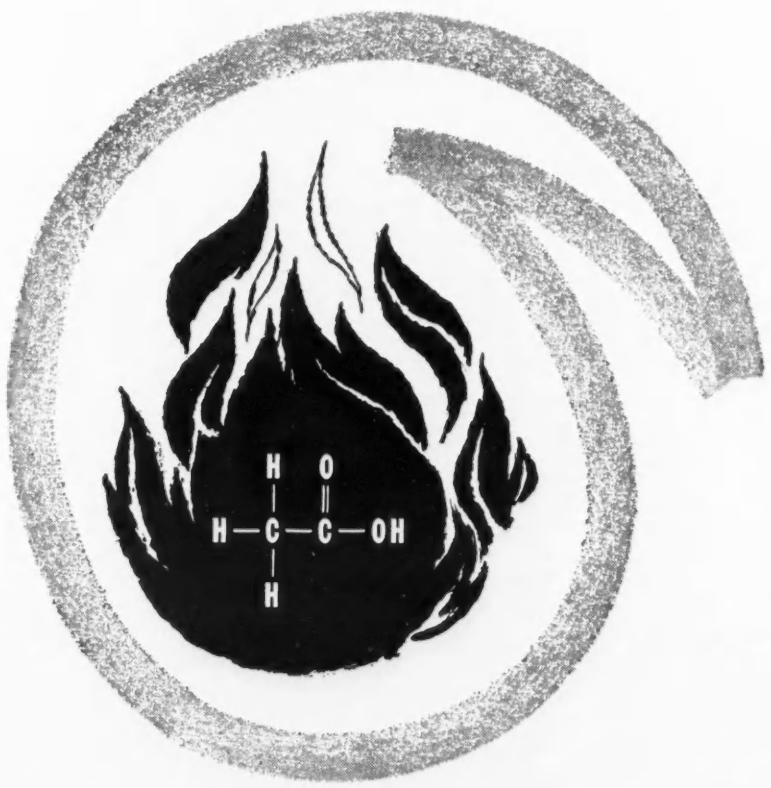

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Copper Scrap Export Quota Is Raised for 4th Quarter

A supplemental export of 3,000 short tons of new and old unalloyed copper scrap has been established for the fourth quarter by the Bureau of Foreign Commerce. The supplemental quota is in addition to the 6,000-ton fourth quarter quota announced in September and reflects lower domestic demand for these materials.

Distribution among exporters of the additional quota will be made on the historical licensing basis already in effect with a small percentage set aside for newcomers. Export license applications may be filed against the quota through December 15.

Electromet Picks Manager

Appointment of F. E. Loeffler as manager of sales promotion for Electro Metallurgical Company, New York, a division of Union Carbide and Carbon Corporation, has been announced. In his new position, Mr. Loeffler will be responsible for administering and co-ordinating the sales promotion activities of the company, including advertising, publicity, and related activities.

Bids Wanted

Chemicals, indefinite quantity, inv. FNW-4L-7322-N, Dec. 13, Gen. Services Adm., Region 3, Business Service Center, 7th & D Sts., S.W., Washington 25, D. C.

Cresylic acid, 9,000 gals., inv. 363, Nov. 21, Purchasing & Contracting Office, McClellan AFB, Calif.

Diammonium phosphate, 2,000 lbs., req. 8498-A, Nov. 28, Procurement Div., Panama Canal Co., 21 West St., N. Y. 6, N. Y.

Ethylene glycol, 10,000 gals., non-corrosive (anti-freeze) and coiling liquid for aircraft engines, inv. 89, Nov. 30, Naval Air Material Center, Supply Dept., Naval Base, Phila. 12, Pa.

Gas, 40,000 lbs. pure anhydrous ammonia, estimated requirements during the period Jan. 1 through Dec. 31, 1957, req. 8560-A, Nov. 27, Panama Canal Co., 21 West St., N. Y. 6, N. Y.

Insecticide, inv. 373, Nov. 20, Navy Purchasing Office, Naval Supply Activities, 3rd Ave. & 29th St., Bklyn. 32, N. Y.

Nitric acid, 33 carboys, inv. 22829, Nov. 23, Govern. Printing Office, Purchasing Agent, Washington, D. C.

Paint, 1,120 gals. interior, resin-base emulsion paint, inv. RIT-91575-R, Nov. 26, 1,092 gals. pigmented spraying lacquer, inv. RIT-91558-R, Nov. 21, 2,610 gals. exterior titanium-lead-zinc and oil paint, inv. RIT-91559-R, Nov. 21, Gen. Services Adm., Region 3, Business Service Center, 7th & D Sts. S. W., Washington 25, D. C.

Phenobarbital sodium, 15,192 bots. of 500 tabs., inv. 381, Nov. 21, small business only, Armed Services Med. Procurement Agency, 84 Sands St., Bklyn. 1, N. Y.

Soda ash, 110,000 lbs., inv. DA-53053, Nov. 27, Gen. Services Adm., Region 7, Business Service Center, 1114 Commerce St., Dallas, Tex.

Sodium bicarbonate, 22,000 lbs., inv. DA-53053, Nov. 27, Gen. Services Adm., Region 7, Business Service Center, 1114 Commerce St., Dallas, Tex.

Sodium hydroxide, 105,000 lbs., solution, tech. 50%, inv. 29, Nov. 23, N. Y. Chem. Procurement Dist., 180 Varick St., N. Y., N. Y.

Sodium metasilicate, 21,500 lbs., anhyd., inv. NY-1JO-69787, Nov. 30, Gen. Services Adm., Region 2, Business Service Center, 250 Hudson St., New York 13, N. Y.

Sodium nitrite, 600 lbs., req. 8498-A, Nov. 28, Procurement Div., Panama Canal Co., 21 West St., N. Y. 6, N. Y.

Sodium phosphate, 4,800 lbs., inv. DA-53053, Nov. 27, Gen. Services Adm., Region 7, Business Service Center, 1114 Commerce St., Dallas, Tex.

Sodium thiosulfate, 380 100-lb. dms., inv. RID-91471-R, Nov. 22, Gen Services Adm., Fed Supply Service, 7th & D Sts. S. W., Washington 25, D. C.

Sulfuric acid, 1,100 1-gal. bots., tech., inv. 229, Nov. 26, Contracting Officer, Raritan Arsenal, Metuchen, N. J.

Xylol, 250 gals., inv. FNW-4L-7171-N, Dec. 5, Gen. Services Adm., Region 3, Business Service Center, 7th & D Sts. S. W., Washington 25, D. C.

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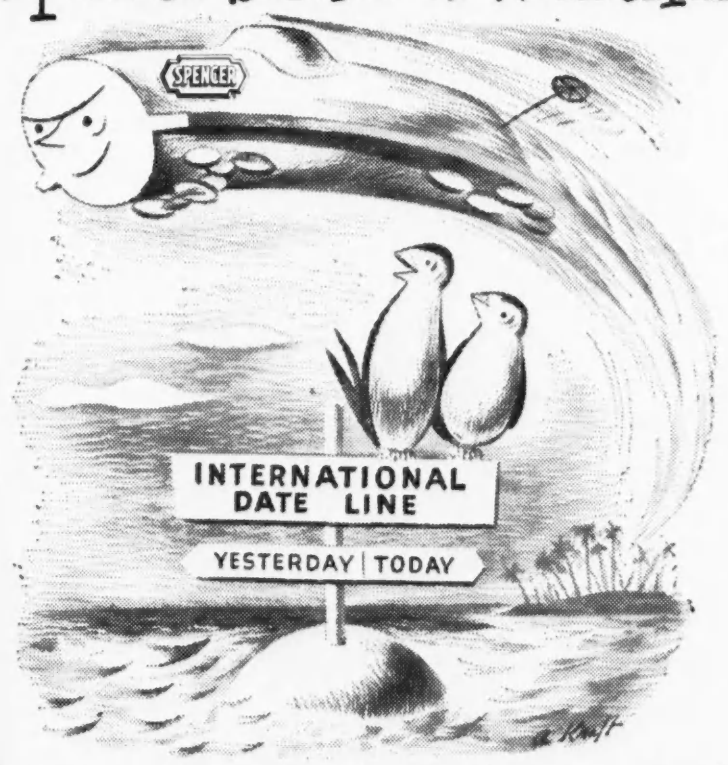

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Agricultural Chemicals

The market continued soft in tone, though some unexpected fall sales were reported and production, as a result, showed some signs of activity. For the most part, however, sales were limited to the general off season level and production was keyed to future seasonal wants and needs. Ammonium sulfate was reported in long supply as the result of heavy steel industry production during the past months. This, in contrast to the European market, which recently unloaded a vast quantity of this material behind the iron curtain, has raised some questions in the minds of domestic producers. Most of the other materials also were in the process of stockpiling material. The pesticides showed signs of foreign sales activity, though it is not at a very great level yet. However, dealers expect a good off-seasonal period. The animal protein market had one of its slower weeks. Little if any material moved. Fishmeal and fishscrap advanced on tight supply as the last trickle of domestic material moved off the spot scene. Some foreign material is expected soon. Limited production of castor pomace was reported. Production of this material continues in fulfillment of earlier commitments.

Liquid fertilizers appear to be making great strides in this market, dealers here reported recently. This movement, which is beginning to look like a sales pattern, has been present in the market for a couple of seasons, it was noted. The reasons are relatively obscure. Though most producers claim that expedience in dispersing and handling is a factor, others note that dispersing of some of the liquid fertilizers is even more complex than the handling of the solid material. However, it is conceded on both sides that more men and money is generally involved in the spreading of the solid material. Also transporting solid material is usually more costly. The liquid fertilizer trend is reportedly most prononuced in anhydrous ammonia.

An authorization was issued to the government of Vietnam last week to purchase $1.2 million of fertilizers, it was reported by the International Cooperation Administration. Purchases to be made under contracts entered prior to March 31, 1957, will include $800,000 of nitrogenous fetrilizers, $200,000 of potash fertilizers and $200,000 of phosphates and other fertilizer materials.

The Pakistan Industrial Development Corporation has reported that Pakistan needs a minimum of one million tons of fertilizer annually. The production target of 162,000 tons annually by 1960, as contained in thet nation's five-year-plan, is thus far below the country's requirements. With a capital investment of 200 million rupees, or $42 million, the country's fertilizer requirements could be produced economically in Pakistan. At present plans have been made for fertilizer plants at Multan, Hyderabad and Sylhet.

Price Trends

Advanced
Fishmeal, $4 per ton.
Fishscrap, $4 per ton.

Reduced
None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
108.68	108.16	106.30	110.78

For Current Prices see Page 9

Animal and Plant Foods

Anhydrous Ammonia—Production of this material totaled 257,014 short tons as compared with the 242,584 short tons produced during the previous month. This reflects a six percent advance in production. The September figure also rises above production for July which amounted to 248,384 short tons. All the figures stand over the 237,202 short tons produced during August, 1955. Stocks on hand at the end of August amounted to 137,148 short tons as compared with the 131,590 short tons on hand at the beginning of the month.

Ammonium Nitrate—Production of original solution ammonium nitrate amounted to 169,866 short tons of September as compared with the 174,021 short tons produced during the previous month. The September figure reflects a two percent decline in production.

Ammonium Sulfate—Supply of this material was said to be in particularly long supply on the domestic scene. Two factors are considered the major contributors to the situation. One was the poor sales level set during the seasonal period; the other is the high production level of the steel industry, thus leaving ammonia sulfate stocks high and growing all the time.

Animal Proteins—The market was quiet last week, dealers here reported. Listings, with the exception of fish productions, continued at their previous positions, with blood selling for $5.25 per pound across the board; tankage selling for $5 out of both Chicago and New York, and hoofmeal still going for $136 per unit.

Fishmeal and fishscrap both advanced in price. The condition of the market was one of the quietness with just a trickle of material moving. What little did move was selling at advanced prices of $140 per unit ton for fishmeal and $136 for fishscrap. The prices before the change, which took place about two weeks ago, were $4 cheaper. A major dealer noted that this is the end of the season for domestic material and this is the final lot of material moving. Imported material should be moving soon, it was said.

Castor Pomace—Only one of the two producing plants for this material was producing last week, dealers here reported, and that only on a limited basis to fulfill contractual commitments. The current listing continues $35 per unit, though there is no material available on spot. The present condition is attributed to the trend toward importing castor oil rather than the whole bean, thus denying pomace manufacturing of the raw bean crush.

Phosphates—Production of concentrated superphosphate during the month of August, according to the Bureau of Census, amounted to 40,825 short tons as compared with the 45,338 short tons produced during the previous month. Production for August, 1955, mounted to 35,223 short tons. Stocks on hand at the beginning of this August were 170,890 short tons as compared with 163,508 for the month previous, and 99,380 short tons at the beginning of August, 1955. Stocks on hand at the close of the month totaled 167,733 short tons. The figures for the end of July were 170,890 short tons and 88,750 short tons for the end of August, 1955.

Pesticides

2,4-D—This material, which is expected to find wide use as a sagebrush killer, is reportedly moving along well in foreign sales, producers here reported last week. Though the material had been in use for some time, its most important use was not discovered until a few months back, during a Department of Agriculture study of the sagebrush problem in the arid Southwest. Sagebrush, long a destructive element in that area, curbed the growth of grass, thus retarding the development of needed grazing land. Application of 2,4-D proved an excellent inhibitor and the Department of Agriculture foresees wider use of the material. The domestic market is expected to grow on the heels of this, and the foreign market, particularly in South America and Mexico, should show good advancement. The material is considered one of the most promising in this category.

DDT—Overseas sales of this material continued to move at a relatively good level, producers here reported, as the foreign market expanded into the void left by the decline of the seasonal domestic market. Though government buying has not, to date, made as great inroads into supplies as it had last year at this time, producers feel that with the exception of certain distressed areas, demand for pesticides and particularly DDT, will be even greater than last year. The growth of the foreign market for this material is felt to be primarily due to government point four work, United Nation health work in the backward areas, and growing recognition throughout the world of the need and uses of pesticides. DDT, with its dramatic discoverer and first use, has been in the forefront of this movement, it was noted.

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Allied Chemical

Coal Chemicals

Conformity on prices of o-cresol was industrywide last week, as all other major producers moved to reduce quotations to the level effected by one company last July 2. Last week's revisions included across the board reductions amounting to 1 cent per pound on 29° material and grades running from 25° to 29°C. Other reductions were, on base quantities, 1½ cents per pound on 30° material and 2 cents per pound on material specified as 30.5° and over. Other revisions adjusted differentials to the now uniform 1¾ cents per pound on carlots drums and 2¼ cents per pound on less carlots drums.

Revision of grade specifications resulted in a technical decline of ½ cent per pound in the minimum prices, across the board, for material melting at above 30°.

Cresylic acid continued to move well generally, but demand for use in manufacture of tricresyl phosphate was still far below normal. Some producers believed that manufacturers might have been taking advantage of depressed prices for poorer grades of ADF imports by switching from TCP to other plasticizing agents that would not forbid use of the poorer grade material.

Benzol was showing unabated vigor.

Toluol, in slightly excess supply in some quarters, was in a better inventory position generally than that noted in the 18 months or more prior to last summer's steel strike.

The market for xylol was strong enough to absorb all cokeoven output easily and yet provide a large-scale market for trade with petroleum producers. Domestic production in the first eight months of calendar 1956 averaged better than 10 million gallons per month.

Phthalic anhydride had been bought up well ahead of production, and normal inventories had not been restored since consumers made a run on them prior to the last price increase, October 15.

Aniline was still weak, reflecting the slower trade in textiles and rubber last summer.

Growth and diversification characterized trade in divinylbenzene.

The American Iron and Steel Institute reported that the industry turned out 11,032,000 net tons of ingots and steel for castings during October, marking the first month in which output exceeded 11 million tons. The figure brought the calendar year total through October to 93,806,591 net tons, compared to an aggregate 96,285,168 tons produced in the like period in 1955.

The institute estimated that steel production in the week ended November 18 would amount to 100.4 percent of theoretical capacity, equivalent to 2,472,000 tons of steel. That figure compared to output of 2,463,000 tons in the week previous, 2,495,000 tons in the comparable week in October and 2,394,000 tons in the corresponding week one year ago.

Basic Products

Benzol—Trade continued highly active last week, with sales reported in heavy volume. High-keyed cokeoven production and substantial imports just added up, along with considerable production from petroleum sources, to provide balance for the very strong demand.

Manufacture of phenol and styrene monomer were providing excellent market support. On the other hand, aniline production had been depressed markedly since last May.

Cresols—All major producers moved last week to meet lower prices put into effect by one producer last July 2.

Certain revisions were made at the same time in the various companies' grade specifications, resulting in a technical decline of ½c. per pound in the base price for material with melting point over 30° C.

Quotations in the latter category had previously varied in tanklots from 15c. per pound for 30° to 31° material and 16c. per pound for material melting at more than 30° C to 16c. per pound for 30° to 30.5° material and 17c. per pound for material melting at 30.5° C and over.

Individual companies made across the board reductions of 2c. per pound in the 30.5° and over material and of 1½c. per pound in the 30° to 35° material (now specified as 30° to 30.49° grade). The grade offered as having melting point 30° and over (now specified as over 30°) was reduced 1½c. per pound in tanklots but only ½c. per pound in drum quantities, effecting thereby a 1c. per pound increase in drum differential.

Thus the range on material melting at 30° C and over was revised from 15c. to 16c. per pound in tanklots, previous, to current quotations from 14½c. to 15c. per pound.

The entire industry was now quoting uniform differentials on all grades of ortho amounting to 1¾c. per pound on carlots and 2¼c. per pound on less carlots. In some cases, differentials heretofore had been as little as ¾c. per pound on carlots and 1¼c. per pound on less carlots.

Grade specifications had now become more uniform also, over-all. Producers thought that there was a good chance that corresponding grades might soon be offered by all major market factors.

Declines in grades with melting point below 30° C, amounting to 1c. per pound on tanklots, resulted in prices that matched without variance (the adjustments in differentials included) the schedule the one company put into effect July 2.

Producers reported more interest in recent weeks and some improvement in the market.

Under consideration but still in research status were new applications that might give considerable stimulus to this trade, producers said.

On the other hand, two major new producers had just become competitive, and there was talk of large-scale expansion of production facilities in some quarters.

Cresylic Acid—Material continued to move well last week in general, but the one soft spot in the end-use pattern remained. Tricresyl phosphate production was still in depressed volume. Its decline was reflected in easier demand for some resin grade acids.

The more desired grades of acid had pretty well disappeared from the import market. ADF material was constituted almost entirely of material meeting only the broader specifications.

Some domestic producers were of opinion that manufacturers might have been attracted by low-price offerings of the poorer grades of ADF to the point where they had switched from TCP to other plasticizing agents whose manufacture would not preclude the use of such material.

A switch of that sort, it was pointed out, might account, in part at least, for the decline in TCP production. Another indication that manufacturers were able to take the price advantage offered by availability of poor grades of ADF material, trade sources noted, was the current differential, averaging about 6½c. per pound, between market quotations for TCP and certain other plasticizing agents that might have been substituted for it.

Toluol—The inventory position, just a bit burdensome in some quarters by last

PriceTrends

Advanced
None.

Reduced
o-Cresol, m.p. over 30° C., ½c. per lb.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
115.56	115.56	115.56	114.66

For Current Prices see Page 9

Coal Chemicals

Estimated output of coal chemicals recovered from cokeoven operations during the week ending November 18 was as follows:—

Ammonia liquor	lbs.	961,788
Ammonium sulfate	lbs.	40,953,538
Benzol	gals.	3,661,498
Coaltar	gals.	17,994,736
Creosote	gals.	698,072
Naphthalene, crude	lbs.	3,893,689
Pyridine, refined	lbs.	13,961
Toluol	gals.	806,661
Xylol	gals.	232,691

week, was still vastly improved in general from what it had been six months ago. Last summer's steel strike had given producers a chance to make a fresh start, and industrial activity during the past several weeks has been brisk enough to prevent stocks from accumulating at the rate that had been anticipated.

It was still too early to appraise the Middle Eastern conflict in terms of market influence, but some trade sources counted on heavier buying and stockpiling abroad. Weakness of late in the European market had made the export market less absorbent and less attractive pricewise. Improvement in Europe could be depended upon to give the domestic market a better tone, producers believed.

Intermediates

Aniline—This market was still easy last week. Sales volume had not yet reacted to improvement in the rubber business, which consumes large amounts of aniline in production of synthetic material.

The textile business, which affords another outlet, was still sick. Several textile mills closed down temporarily last summer.

Production began to pick up in August but it was still far below the average of some months ago. Producers turned out 131,998,703 pounds last year. Production amounted to 11,874,180 pounds in January, 12,593,299 pounds in February, 13,168,948 pounds in March, 12,488,873 pounds in April and 12,411,334 pounds in May. Then a sharp decline appeared. Output was only 8,760,816 pounds in June and dropped to 5,602,527 pounds in July. It was 7,284,921 pounds in August.

Producers expected trade would pick up appreciably when seasonal activity common to the fourth calendar quarter makes its impact on this market.

Divinylbenzene—This market was little changed from the position it occupied several months ago. It still appeared to be a growing market and had continued to expand gradually throughout the current calendar year. Volume was still not heavy, but there were some sales in tanklots reported.

Phthalic Anhydride—Producers reported that their customers had scraped the bottom of the barrel in the rush to get phthalic prior to October 15 at the old, lower prices in effect until that date. In consequence, there was virtually no market last week. However, prompt delivery of production through November was already spoken for at most plants. Production was scheduled to continue without curtailment, and nowhere had appreciable inventories appeared.

Trade sources were optimistic for business prospects through the next several months in view of revived automotive production and increased activity in hard goods generally, providing a sound basis for sales of phthalic for manufacture of alkyd resins. They pointed out also that a high level of general prosperity had been reached and that more people were employed.

Including an East German plant with capacity to produce 13,227,600 pounds, the phthalic anhydride capacity of Western Europe was put at 275,222,300 to 277,426,900 pounds. Currently planned was construction of additional facilities with estimated total capacity of 75,706,000 to 97,756,000 pounds.

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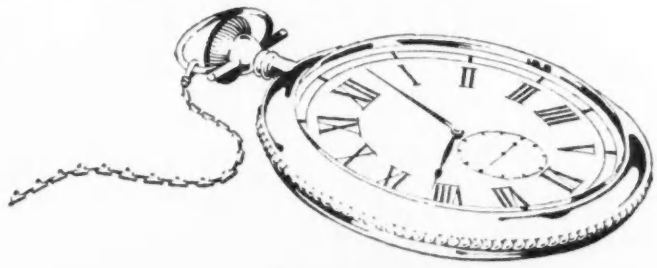

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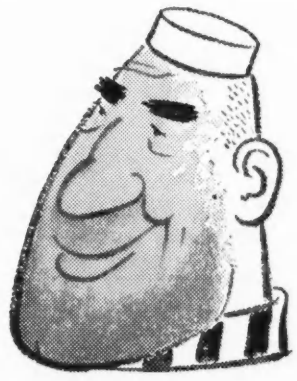

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Phosphorous Furnace Runs 4 Years Without Interruption

Shea Chemical Corporation, Jeffersonville, Ind., has found its No. 1 phosphorus furnace in "remarkably good condition" after a run of nearly four years without interruption for internal inspection and repair.

The unit was inspected, following its shut-down for enlargement last month, when Shea's newest phosphorus furnace, at the same location, began operation.

"Ordinarily, phosphorus furnaces of this size are shut down for inspection and repair about every year and a half," O. D. Crosby, production vice-president said. Because of the expense of repair, as well as the loss of production during the several-week period needed to repair a furnace interior, we have watched the furnace performance closely, throughout the entire operational period. Each time, our evaluation has been that the furnace could be operated for an additional period without endangering the furnace crucible. So we have kept operating."

Synthetic Paraffin

—Continued from page 5

tions, availability and variations in purity. "Paraflint" characteristics, such as hardness, water resistance and high-shining quality when buffed, make it usable in polishes of emulsion solvent and paste types, it was said.

"Paraflint's" high-melting point of 215 degrees Fahrenheit, as contrasted with the 150 degrees of conventional waxes, will contribute considerably to the solution of problems confronting manufacturers of paper cups used in the dispensing of hot liquids, and makers of wrappings for packaging hot foods, Moore & Munger said.

"Paraflint" as a petroleum wax modifier has been found effective in paper coatings, where paraffin or microcrystalline waxes are used because it improves gloss stability, hardness, tensile strength grease and dust resistance, scuff and blocking.

When blended in small percentages with paraffin wax, the synthetic product can be used in hardening, opacifying and stiffening in the production of candles, and as a substitute or extender for carnauba in lacquer coatings used on candles.

Laboratory research indicates that "Paraflint" can be used by makers of inks, plastics, rubber and insulation products, paints, varnishes, lacquers, and as a replacement for vegetable and mineral waxes in chewing gum, asphalt compounds, powdered lubricants, carbon papers and sizes for paper and textiles.

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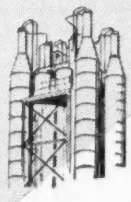

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Drugs, Fine Chemicals

A major producer announced advanced prices for ferric-ammonium citrate. Prices for granular brown and green pearls were increased 5 cents per pound on spot and contract. Otherwise, prices on pharmaceuticals and fine chemicals were firmly quoted and overall inquiry was brisk. Seasonal interest in products contained in analgesic and medicinal winter preparations continued to hold buyer interest, although some reports indicated sales were lagging behind record levels attained last year. This sluggishness was attributed by some to unseasonally mild weather in recent weeks.

The demand for vitamins was strong and producers were optimistic concerning prospects for the coming weeks. In some cases, it was reported, record production levels would be attained for the closing six months of 1956.

Stronger interest was reported in all grades of tragacanth and locust bean gums. Botanical buying was spotty with some producers reporting a moderate business volume and others stating that sales left much to be desired. The overall tone of the market was a bit firmer as the botanicals drug buying season is generally at its best during the fall and early winter months.

Demand for reserpine was moderate to good. As a tranquilizer drug, it was stated that reserpine has lived up to the promise it showed when introduced by research workers over three years ago. Joint research has brought about the determination of the chemical nature of reserpine much more quickly than was to have been anticipated under normal conditions.

Aspirin—Major producers continued to report a good seasonal increase in the demand for aspirin as well as other items used in analgesics and medicinal winter preparations. Prices were firmly quoted and are unchanged. Supplies were plentiful and orders were promptly being filled.

Ammonium Bromide—Demand was routine and supplies were quite adequate to handle current trade requirements. NF granular material in 450 pound barrels was priced at 42c. per pound. Sales were steady at a low volume.

Ammonium Sulfate—Purified material was quoted ranging in price from 9c. to 9½c. per pound. Supplies were plentiful to handle current modest trade needs. Sales were steady at a moderate level.

Calcium Bromide—NF material, 100 pounds or more, was reported by major producers at 92c. per pound. Supplies were quite adequate to handle the current needs. Demand was steady at a moderate volume. Calcium bromide finds use in photography, in the manufacture of mineral waters, in freezing mixtures and as a dehydrating agent.

Carmine—A labor shortage which has cut down on the collection of high grade cochineal was cited as a major factor in the sharp price advances of carmine during the past two years.

In July, 1954, carmine No. 40 was quoted at $7.80 per pound while in March of the following year the price was $14.40. Currently, the price of NF bulk material, 100 pounds or more, is $16.80.

Carmine is an aluminum lake of the pigment from cochineal. Cochineal consists of the red coloring matter from the dried bodies of insects which live on cactus plants in Mexico, Algeria and in the East Indies. Due to the back-breaking nature of the work involved in the collection of these insects and the fact that better paying jobs are available, it has been difficult to recruit native labor.

Carmine is used in dyes, inks, for coloring food and as an indicator in chemical analysis. The coloring principal obtained from cochineal is carminic acid. It was said there is no adequate substitute for carmine in cases where natural vegetable color is desired.

Cerium Oxide — Optical grades, 50 pound lots or more were quoted at $1.85 per pound. Demand was steady and sales were at a low volume. This material is used in x-ray investigations, for polishing glasses, as an optical sensitizer in photosensitive glass and as a stabilizer to prevent browning of glass in radiation glass. Lots of 100 pounds of 74 percent cerium hydrate were priced at $1.44 while the 77 percent grade went for $1.74 per pound. Ceric sulfate, used as an analytical reagent and in the dyeing and printing textiles industry, was priced at 35c. per pound.

Citric Acid—A major producer reported demand for citric acid as very good. Supplies were plentiful and prices current in recent weeks were firm and expected to remain so for the weeks ahead.

Citric acid continues to find good use as a sequestering agent in secondary oil recovery processes. The acid is added to well water and acts to prevent iron plugging which is the primary cause of flow stoppage. In this manner, it was pointed out, recovery time is shortened and yield is increased.

Degras—Demands were typically modest and supplies were quite plentiful. Sales of degras to the petroleum industry have suffered in recent years, it was said, due to the fact that an increasing number of petro-chemicals have found good trade acceptance.

Ferric-Ammonium Citrate—A major producer announced price increases of 5c. per pound on granular green and brown pearls. Advances were attributed to increased costs of production which could no longer be absorbed. Current prices range from 65c. to 68c. Lots of 2,000 pounds or more are priced at 65c.

Lanolin—Competition was very strong for the considerable year-round business volume typical of this market. Price increases of October 1 were generally reconfirmed by some producers. In other quarters it was felt that prices prevailing earlier in the summer reflected a truer market picture. Prices quoted on cosmetic grade lanolin ranged from 26c. to 30c., USP anhydrous 24c. to 27c. and USP hydrous 22c. to 26c.

Menthol—Demand for menthol were seasonally good and supplies were readily available. Brazilian menthol ranged in price from $6.40 to $6.50 per pound. Competition was very keen as might be expected between synthetic, racemic and the natural grades. Synthetic material was priced at $4.75 per pound.

Niacin—Interest was strong and expected to continue so throughout the remaining months of the year. Currently, niacin is being used in increasing amounts in enrichment mixtures and multi-vitamin preparations. Supplies were reported quite adequate and all calls were being met promptly. Prices were firmly quoted at $8 for fifty kilograms or more.

PAS—Producers reported interest was moderate for the fall season and sales lagged somewhat behind those of last year. The consensus of opinion was that buyers had stocked adequate supplies for their treatments. No changes were expected in the near future.

Aminosalicylic acid is usually given in the form of a buffered solution with streptomycin or isoniazid in the treatment of tuberculosis.

Prices were quote dt $4.25 per pound on 1000 pounds lots.

Phenobarbitol — Demand was fairly steady and supplies were quite adequate. Prices on phenobarbitol and the soluble sodium phenobarbitol ranged from $3.25 to $3.75. Sales were steady at a low volume. Prices have been unchanged in recent months.

Quinine and Salts—Sales of quinine alkaloid were reported steady at a low volume. Prices were reported on the alkaloid as they have been in the past, at 54c. per ounce. Bisulfate, USP material was listed at 37½c. in 100 ounce lots while the hydrochloride, same quantity, was priced at 35c. Sulfate prices were 29c. per ounce. Supplies were quite plentiful and demand was routine.

Reserpine—Interest was good and the market for reserpine alkaloid was highly competitive. Prices were quoted at $3.75 per pound. In recent months the increased accuracy of determining the crystalline, pure reserpine which may be obtained from a given amount of rauwolfia

PriceTrends

Advanced

Ferric-ammonium citrate, brown pearls, 5c. per lb.
green pearls, 5c. per lb.

Reduced

None.

Comparative Price Indexes

(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
65.23	65.22	65.64	66.42

For Current Prices see Page 9

gane's

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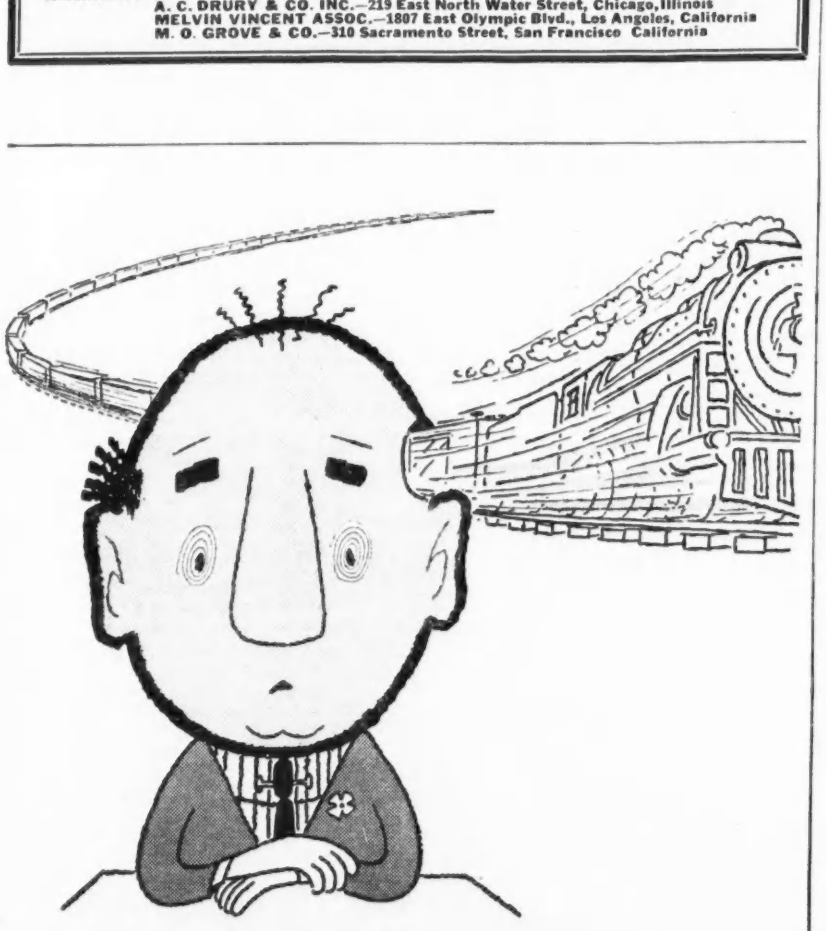

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Drugs, Fine Chemicals

root has been an important factor in lowering the price from the high of $25 per gram quoted at the close of 1954 to the current price of $3.75.

Manufacturing processes consist of extracting reserpine from various species of rauwolfia root, such as the serpentine and vomitoria, by means of solvents and condensation and crystallization of the pure reserpine.

Reserpine is probably the most widely known of the tranquiliber drugs used in the treatment of hypertensive, nervous and mental disorders.

Botanicals

Large volume domestic botanicals continued to be in short supply as they have been since the beginning of the fall season. Items like cascara bark, black haw bark, wild cherry bark and pine tree bark were scarce and getting more so. The market exhibited a generally firmer tone as the fall buying season was said to be well underway. Producers indicated that drug buying in recent years has been on a somewhat reduced scale. Interest in tragacanth gum was reported good for ribbons as well as USP powder. Locust bean gum was in good demand and reported moving at prices slightly higher than those prevailing earlier in the season.

Imported botanicals were in good supply for the most part and supplies were adequate on most items. There was moderate interest in licorice root, both for the granular and for the powder. Senna leaves were said to be moving into a tighter supply situation although orders are currently being filled with no difficulty.

Karaya Gum—Demand was said to be seasonally good for all grades and prices

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were firmly quoted. Karaya No. 1, NF powder, in barrel quantities, was priced at 45c. per pound as was No. 2 while No. 3 grades were at 40c. per pound.

Locust Bean Gum—This item was in a tight supply situation and demand was very good. Prices on powdered material in bags was reported to be ranging in price from 45c. to 50c. per pound. Crops were said to have been spoiled this year causing the shortages.

Senega Root—Demands were routine and supplies were good. Senega root, in barrel quantities, is currently being quoted at $2.75 per pound.

Senna Leaves—Supplies were reported adequate and prices on Alexandria, whole and half leaves, were quoted at 19c. per pound. Siftings were 17c. per pound while Tinnevelly No. 1, in barrel quantities, ranged in price from 16c. to 18c. Tinnevelly No. 2 same quantity, was in a range of 13c. to 15c. and Tinnevelly No. 3 was quoted at 11c. to 13c. Powdered material in boxes or barrels, was 15c. per pound while pods were priced at 14c. per pound.

Serpentaria Root—Demand was reported good and material was moving at prices slightly above those quoted in earlier months. It was stated that serpentaria root, in barrel quantities, would most accurately be quoted at $6 per pound. Supplies were quite adequate to handle current trade requirements.

Tragacanth Gum—Interest was said to be very strong with prices on No. 1 ribbons quoted at $4.50 per pound while No. 2 ribbons went for $3.50. No. 3 ribbons were reported at $3.25. This item was reported to be moving into a tight supply position. It was reported that prices might be increased.

Pakistan's Fertilizer Output Lags Behind Requirements

Pakistan's fertilizer production target of 162,000 tons annually by 1960 is far below the minimum of 1 million tons annually required by the country, the Department of Commerce reports.

With a capital investment of $42 million, the country's fertilizer requirements could be produced economically in Pakistan, according to Pakistan Industrial Development Corporation, PIDC's current plans envisage fertilizer plants at Multan, Hyderabad and Sylhet.

The cement production target of 1,380,000 tons annually also is considered inadequate by PIDC, which has set a target of 2 million tons annually to be achieved in the next three years.

The availability of natural gas for the attainment of these targets would mean low production costs in these important fields—fertilizer, cement and power—according to PIDC.

ADMA to Convene in West

American Drug Manufacturers Association will hold its 1957 annual meeting April 22 to 25 at the El Mirador hotel, Palm Springs, Calif.

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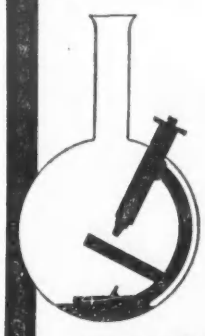

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64 dms, Geigy Chemical Corp, Bremerhaven
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50 dms, L & R Organic Products Co, Rotterdam
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250 bgs, Seville
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ARGOL—394 bgs, Tartaric Raw Materials, Buenos Aires
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ASPHALT RAFAELITA—625 bgs, Zophar Mills, Buenos Aires
BARBASCO ROOT—141 bls, Brown Bros, Callao
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BEESWAX—25 bgs, Cornelius Wax Refining, Puerto Plata
50 bgs, Biddle Sawyer Corp, Ciudad Trujillo
100 pkgs, Balfour Guthrie, Lisbon
107 pkgs, Smith & Nicols, Lisbon
45 bgs, Tampico
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12 hf cs, Noville Essential Oil Co, Messina
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BILE, OX—2 dms, Merck & Co, Copenhagen
BISMUTH—107 cs, Cerrode Pasco Corp, Callao
BLANC FIXE—800 bgs, C J Osborn Co, Rotterdam
BLEACHING POWDER—306 dms, Chemical Manufacturing Co, Liverpool
BOIS DE ROSE OIL—3 dms, Hollander Trading Corp, Belem-Para
CADMIUM—145 cs, C Tennant Sons & Co, Liverpool
91 bdls, Danwill Co, Liverpool
CALCIUM AMMONIUM NITRATE—10 bgs, N Y Hanseatic Corp, Rotterdam
CAMPHOR OIL—10 dms, Lo Curto & Funk, Kobe
10 dms, Keelung
POWDER—38 cs, Lo Curto & Funk, Keelung
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CARAWAY OIL—2 dms, Magnus Mabee & Reynard, Rotterdam
SEED—150 bgs, Rotterdam
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267 bgs, Baker Irons & Dockstader, Fortaleza
13 bgs, Phila National Bank, Tutoia
351 bgs, Empire Trust Co, Tutoia
500 bgs, Biddle Sawyer Corp, Tutoia
415 bgs, Strahl & Pitsch, Tutoia
321 bgs, Wm Diehl & Co, Tutoia
150 bgs, Cornelius Wax Refining, Tutoia
426 bgs, National City Bank, Tutoia
CAROB—107 bgs, Meer Corp, Piraeus
CASHEWNUT SHELL LIQUID—34 tons, N Simmons & Co, Cochin
CASSIA—181 bls, Jacoberg Overseas Inc, Rotterdam
2,235 bls, Rotterdam
CASTOR BEANS—9,290 bgs, Spencer Kellogg, Salvador
212 bgs, Spencer Kellogg, Kingston
9,499 bgs, Baker Castor Oil Co, Salvador
OIL—332 tons, Bunge Corp, Bombay
117 tons, Baker Castor Oil Co, Bombay
249 tons, Baker Castor Oil Co, Rotterdam
CHESTNUT EXTRACT—2,000 bgs, Tanimex Corp, Marseille
500 bgs, Barkey Importing Co, Genoa
CHLORINATED RUBBER—600 bgs, C M C Chemicals Inc, Liverpool
CHLOROACETIC ACID, MONO—200 dms, H A Gogarty, Rotterdam
CITRONELLA OIL—100 dms, Lo Curto & Funk, Keelung
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20 dms, A Verley & Co, Keelung
CLOVE—400 bgs, Mombasa
OIL—20 dms, Dar es Salaam
STEM OIL—15 dms, Fritzsche Bros, Dar es Salaam
COALTAR DYES—20 dms, Geigy Chemical Corp, Hamburg
6 dms, Hensel Bruckmann & Lorbacher, Antwerp
38 dms, Hensel Bruckmann & Lorbacher, Rotterdam
COCHINEAL—22 bls, S B Penick & Co, Callao
32 bgs, Irving Trust Co, Las Palmas
COCONUT OIL—900 tons, American Trust Co, Cebu
249 tons, Cargill Inc, Manila
800 tons, American Trust Co, Zamboanga
613 tons, Manila
COD LIVER—256 dms, Silmo Chemical Corp, St Johns
OIL—100 dms, Ottol Oil Co, St Johns
COPAL GUM—64 bgs, Wm H Scheel, Manila
CORNMINT OIL—1 dm, Fritzsche Bros, Keelung
CREAM OF TARTAR—100 bgs, T M Duche & Sons, Genoa
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CRESYLIC ACID—100 dms, M W Hardy & Co, London
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CUTTLEFISH BONE—240 cs, Marseille
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652 bgs, Guaranty Trust Co, Rotterdam
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262 bgs, Lydia Pinkham Co, Kingston
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157 dms, Baker Irons & Dockstader, Bremen
450 bgs, Naftone Inc, Rotterdam
937 bgs, Reichard Coulston, Larnaca
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FERRIC SULFATE—110 dms, Hudson Shipping Co, Liverpool
FISHLIVER OIL—2 dms, Albumina Supply Co, Yokohama
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7 dms, R S Reade, Yokohama
4 dms, J D Smith Interocean, Yokohama
FISHMEAL—1,080 bgs, Wilbur Ellis Co, Capetown
FUEL OIL—107,607 bbls, Paragon Oil Co, Punta Cardon
105,962 bbls, New England Petroleum Corp, San Lorenzo
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172,000 bbls, Esso Export Corp, Aruba
363,045 bbls, Esso Standard Oil Co, Aruba
29,244 bbls, Esso Standard Oil Co, Las Piedras
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139,147 bbls, Metropolitan Petroleum Corp, Curacao
10,000 bbls, Asiatic Petroleum Corp, Curacao
FUNGICIDES—45 dms, Ringwood Chemical Co, Rotterdam
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300 bgs, M Corbett, Marseille
GERMANIUM OXIDE—131 cs, American Metal Co, Antwerp
GINGER—93 bgs, P John Hanrahan, London
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GRAPHITE—260 bgs, Hanover Bank, Mombasa
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300 bgs, Stein Hall & Co, Itajai
1,600 bgs, J N De Sousa Co, Tutoia
1,600 bgs, American Metagrapa Co, Itajai
334 bgs, J N DeSousa Co, Tutoia
TARTARIC ACID—300 bgs, Nylos Trading Co, Genoa
THALLIUM—1 cs, Cerro de Pasco Corp, Callao
SULFATE—2 cs, Rotterdam
THIAMINE HYDROCHLORIDE—30 dms, Mitsubishi International Corp, Yokohama
THYME LEAVES—30 bgs, H Marmorek & Son, Marseille
193 bgs, M J Golombeck, Alicante
80 bls, Louis Furth, Marseille
TONKA BEANS—20 cs, Wm M Allison & Co, Belem-Para
TRIHYDROXYBENZENE—10 kgs, D F Young, London
TUNG OIL—349 tons, Internatio Rotterdam, Buenos Aires
TURMERIC—94 bgs, Chemical Bank, Callao
68 bgs, Mincing Trading Corp, Kingston
UREA, SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Glasgow
VALONIA CUPS—6,019 bgs, Barkey Importing Co, Izmir
VANILLA BEANS—12 cs, L A Champon & Co, Mombasa
VITAMIN B1—5 cs, Nichimen Co, Kobe
118 dms, Nichimen Co, Kobe
WATTLE BARK—2,237 bls, M S Kattenhorn & Co, East London
WAX—100 bgs, Wax & Rosin Products, Bremen
WHITING—800 bgs, Smith Chemical & Color Co, Hull
2,800 bgs, N H Weitzner, Antwerp
1,600 bgs, Pluess Staufer, Antwerp
60 bgs, Antwerp
WOOL GREASE—100 dms, N I Malmstrom, Manchester
59 dms, N I Malmstrom, Rotterdam
3 dms, Charles of the Ritz, Bremen
ZINC CHLORIDE—1 dm, Rotterdam

Los Angeles

AGAR—22 cs, Pan Asiatic Trading Co, Shimizu
COPRA—2,000 bgs, Pacific Vegetable Oil Corp, Cebu
6,000 bgs, Bank of California, Manila
EARTH COLORS—2,475 bgs, Naftone Inc, Rotterdam
PEATMOSS—1,250 bls, John Schumacher Co, Bremen
200 bls, Plant Food Corp, Bremen
500 bls, Joe Abbegg, Bremen
270 bls, Wilbur Ellis Co, Bremen
500 bls, Wilbur Ellis Co, Hamburg
850 bls, H V Neotbaar, Rotterdam
PETROLEUM, CRUDE—16,845.2 tons, The Texas Co, Columbia
6,909.80 tons, The Texas Co, Puerto La Cruz
27,148 tons, Wilshire Oil Co, Las Piedras
22,085.892 tons, The Texas Co, Sungai Pakning
90,000 bbls, Richfield Oil Co, Vancouver

Philadelphia

AMMONIUM BICARBONATE—100 dms, Chemical Manufacturing Co, Middlesbrough
ASBESTOS FIBER—6,400 bgs, Chas Kurz Co, Lourenco Marques
CASEIN—1,500 bgs, National Casein Co, Buenos Aires
CRESYLIC ACID—300 dms, Glasgow
CUTTLEFISH BONE—100 cs, Cadiz
FATTY ACIDS—26 dms, Goldwynne Chemical Corp, Hull
FISH SOLUBLES—500 bgs, Albumina Supply Co, Capetown
GYPSUM, CRUDE—6,115 tons, U S Gypsum Co, Hantsport
11,936 tons, National Gypsum Co, Halifax
HEXYL ALCOHOL—94 dms, Rohm & Haas, Bremen
LAURIC ACID—300 bgs, I R Boody & Co, Copenhagen
MAGNESITE—200 tons, Sibenik
3,062 tons, Split
MYROBALANS EXTRACT—340 bgs, River Plate Corp, Hull
NAPHTHALENE—922 bgs, Gallard Schlesinger, Hamburg
600 bgs, Antwerp
PEATMOSS—500 bls, Keer Maurer, Bremen
500 bls, E Dunwoody, Bremen
500 bls, Premier Peatmoss Corp, Bremen
900 bls, Bremen
PETROLEUM, CRUDE—247,281 bbls, Atlantic Refining Co, Puerto La Cruz
104,299 bbls, Atlantic Refining Co, La Salina
252,944 bbls, Gulf Oil Corp, Puerto La Cruz
254,156 bbls, Gulf Oil Corp, Mina Al Ahmadi
125,861 bbls, The Texas Co, Covenas
150,571 bbls, The Texas Co, Las Piedras
135,450 bbls, The Texas Co, Sidon
135,263 bbls, The Texas Co, Puerto La Cruz
POLLACKLIVER OIL—100 dms, Interocean Chemical & Minerals Corp, Yokohama
POPPY SEED—200 bgs, Rotterdam
POTASSIUM MURIATE—2,780 tons, Woodward & Dickerson, Hamburg
PYRETHRUM FLOWERS—127 bls, Marine Midland Trust Co, Dar es Salaam
QUEBRACHO EXTRACT—200 bgs, Glasgow
SODIUM FLUORIDE—250 bgs, Chemical Bank, Rotterdam
UREA—5,000 bgs, Nylos Trading Co, Genoa
SYNTHETIC—4,000 bgs, Chemical Manufacturing Co, Middlesbrough
VANILLA BEANS—47 cs, Camax Co, Vera Cruz
41 cs, Zink & Trieste, Vera Cruz
WATTLE EXTRACT—460 bgs, River Plate Corp, Durban
WHITING—41 tons, Antwerp
ZINC DUST—112 dms, Rohm & Haas, London

San Francisco

AMMONIUM BICARBONATE—10 bgs, C M C Chemicals Inc, Middlesbrough
COPRA—1,200 tons, Cargill Inc, Cebu
PETROLEUM, CRUDE—30,044 tons, Standard Oil Co, Sungai Pakning
22,369 tons, Tidewater Oil Co, Sungai Pakning
SESAME OIL—70 cs, Wing Sing Chong, Kobe

Epoxy Compounds Available From Becco for Experiment

Two novel epoxy compounds—dipentene monoxide (dl-l-methyl-1,2-epoxy-4-isopropenylcyclohexane) and alpha-pinene oxide (d-2,6,6-trimethyl-2,3-epoxybicyclo [3.1.1] heptane)—are now available in experimental quantities from Becco Chemical Division of Food Machinery & Chemical Corporation, Buffalo, N. Y.

Dipentene monoxide combines the reactivity of any epoxy group with that of an olefinic double bond in a cyclic terpene molecule. It is a water-insoluble, solvent-soluble liquid of characteristic odor. It undergoes all the reactions typical of the epoxy group and the external double bond of the terpene molecules. It contains typically about 9 percent oxirane ogxygen and has a purity of 85-88 percent. Laboratory quantities are now available for evaluation.

Alpha-pinene oxide combines the reactivity of an epoxy group with that of the bicyclic system of alpha-pinene. It is a colorless liquid of camphor-like odor, insoluble in water and soluble in organic solvents. It undergoes a number of unusual reactions. In the presence of a trace of acid, alpha-pinene oxide rearranges in aqueous media to give mainly sobrerol, while under anhydrous conditions campholenic aldehyde is the main product. The compound contains typically about 9.4 percent oxirane oxygen and has a purity of about 90 percent. It also is available in laboratory quantities for test purposes.

Respiratory Illness Vaccine Found Effective by Army

Development of a vaccine which effects a 98 percent reduction in acute respiratory illness caused by adenoviruses affecting the military population has been reported by the Department of the Army.

Dr. Maurice R. Hilleman, chief of the department of respiratory diseases at Walter Reed Army Institute of Research, speaking before the Epidemiology and Laboratory Sections on the American Public Health Association, meeting in Atlantic City, reported on the new vaccine.

The diseases caused by the military-type adenoviruses—and against which the vaccine protects—are commonly referred to as grippe, catarrhal fever, virus penumonia, sore throat, and severe colds. These viruses do not cause the common cold, however.

A preliminary report, made in May, 1956, indicated that this vaccine effected an 80 percent overall reduction in hospitalization of recruits for respiratory disease of all causes.

The present report, a result of further evaluation in the Walter Reed laboratories, shows that the vaccine actually effected a 98 percent reduction in adenovirus disease specifically, after eliminating the diseases caused by other agents.

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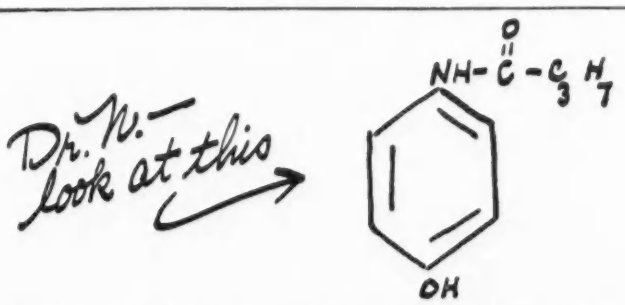

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Essential Oils, Aromatics

The market as a whole appears to be showing some strength as the result of the Middle East situation. This holds true despite the recent slight relapse suffered by the seeds and spices market that came on the heels of the cease fire. Oils such as lemongrass, which just prior to the development of the Suez crisis, was showing a soft tone because of heavy newcrop production, continues to show some strength in spot as reflected in the price advance of some two weeks ago. Bulgarian rose oil also showed very good strength. Pine needle (abies) oil advanced 50c. per pound to a $4.00 inside listing. Dealers attribute this to their inability to get any material out of Russia. The contention is that replacement will be virtually impossible. Wormseed oil advanced also, though this movement was attributed to the slight size of this years crop. The current listing is $4.25 per pound or 35 cents higher than the previous quote.

Bois de rose appeared to be showing some slight strength again, in its up and down struggle toward stability. Ocotea cymbarum on the other hand, continued low and soft in tone. Reports have it that efforts are being made to organize the source and market of this material along the lines of the bois de rose market, but no further information on this has been forthcoming.

The aromatic chemicals market appeared to revive from its earlier lethargy on the heels of rising oil prices of material passing through the Suez crisis. Since the situation is expected to stand for some months, producers contend that the off-season months might well be weathered on the wings of this unexpected help.

The seeds and spices market suffered some relapse of prices upon the report of a cease fire in the Canal zone. However, dealers contended that the prices were up only because of the created situation and were bound to decline upon its ending. Yet, it is contended that the Suez situation will worsen before it rights itself completely. This argument is partially based upon the premise that the canal will be closed for another two to three months at least, because of the damage and innumerable ships that have been sunk at its extremities. Thus, the argument is that supply, even if shipping starts traveling around the horn, should tighten considerably, with resultant rising market conditions, before the situation straightens itself out.

Price Trends

Advanced
Oil, palmarosa, 15c. per lb.
Pine needle, 50c. per lb.
Wormseed, 35c. per lb.

Reduced
None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
138.30	138.29	137.85	134.84

For Current Prices see Page 9

Essential Oils

Bois de rose—The market for this material appeared to level out somewhat, last week, dealers here report. The current listing of about $3.75 per pound, is reported to be generally quoted by most dealers in the spot area. Though conditions in the market, since the ascent of the new governing group, has been on-again, off-again, during the past weeks, buyers here noted that the firmer hold at source is beginning to make itself felt. Spot dealers of Peruvian material noted that they are virtually without oil. This, according to sources, means that the excess bois de rose that had been dumped in the "Peruvian" market and then sold at spot at much lower than the going Brazilian price, has been cut off at source. If this course is persued further by the economic powers in the Brazilian oil market, bois de rose in the future will either stand or fall on the regular Brazilian listing.

Citronella—Reports from source noted last week that shipping prices have risen heavily from the low level reached a number of weeks ago. The advance has been attributed to information that production was lower than originally estimated. Formosan (Java-type) material, a while back, dived heavily in price, carrying most of the other materials with it. The present report, though it has already brought the market up to a higher level is not attributed to add any real stiffness to this market until portion of the heavy quantity of material available has been digested.

Geranium—African material was reportedly growing firmer in price, dealers at source reported. This condition is attributed to two major factors: one is a reported shortage in newcrop, and the other is the constantly advancing Bourbon quote. The situation does not look as if it will reverse itself any time soon. Moroccan material, it was noted, has also been following this trend.

Ocotea Cymbarum—The price of this commodity continued to fluctuate at a level which makes distillation of sassafras oil non-profitable. To avoid a wide-spread discouragement among producers and total discontinuance of distillation, efforts are being made by private industry as well as state intervention to better organize production. Also, recently, a new management has stepped into the South American oil scene (bois de rose) that may eventually effect this oil. It is too early yet to truly evaluate the effect of the measures of this latter group. Needless to say that a stabilization of production and of price at an adequate level would be welcomed by both producers and consumers.

Palmarosa—This market remained soft in tone last week despite the fact that no further price shifts have taken place since the decline of three weeks back, dealers here reported. The current listing of $8.25 per pound, is 15c. higher than the listing quoted a month ago. Dealers attribute the present situation to earlier reports out of Turkey of a good crop and heavy production. Shadings have been reported and one dealer quoted the material at a dollar less than the accepted spot listing.

Pine Needle — Siberian pine needle (abies) oil rose sharply last week on spot, dealers here reported. The current listing, a range of $4-$4.50 per pound, is 50c. higher on the inside than the previous quote. Dealers attribute the firming market to the fact that little or no material is coming out of Russia. This, they claim, is due to present world conditions. Dealers holding the material at present note that once the present supply is exhausted, they don't know if further replacements will be available.

Spearmint—The situation for this material is much like that of peppermint oil, dealers here agreed last week. The current situation evolved from a heavy but not overly good crop of spearmint. A soft tone commenced in the market when government reports of the size of the large crop were first published. Further reports of an even heavier crop brought the first price shadings and then, when the full extent of the situation became known, the first price declines were announced. The present situation is expected to remain until a goodly quantity of the material has been digested by spot and overeas buying.

Wormseed—The price of wormseed oil on spot advanced last week, dealers here reported. The current listing of about $4.25 per pound is 35c. higher than the previous quote. Dealers noted that the price advanced despite a relative lack of interest on the part of buyers. They attribute the movement to the small size of this years newcrop.

Aromatic Chemicals

Producers here have reported a tendency toward strength in this market, particularly in the materials derived from or used as replacements for essential oils source materials held up by the situation in the Middle East. A possible relapse in the situation may follow if the pattern of the source market is followed very closely. However, the feeling now is that the situation will not resolve itself completely for some little time, and no matter when the resolution may take place, the Canal will not be cleared for two or three months at the least.

Seeds and Spices

A major spot dealer noted: the market decline in the course of last week was due mainly to apathy among the buyers. The

Essential Oils

Near East situation contained potential threats which continued to be viewed with varying degrees of alarm in the trade here and abroad. The thing that must be held in mind that the Suez Canal, no matter when the crisis is resolved, will be out of commission for at least two or three months.

In the face of this situation, the decline in spot prices was surprising. Since it is impossible to predict the course which political events will take, it is unwise to predict the price developments in the pepper market, which are being determined more by political events than the mere economic statistics.

Gingers — Supplies of Jamaican grades are reportedly very limited. Dealers claimed that only jobbing lots of Split Nigerian and African were offered on spot. Cochin was said to be more generally available and is supposedly the lowest priced. Newcrop cochin is said to have attracted interest because of the discount.

Nutmeg—This oil along with mace has remained very strong on spot over the past months as the result of continued tightness in the source material market. The condition basically derived from storm damage last year in which vast quantities of crop and many plantations were damaged. Reports at the time noted that some of the damage would not be repaired for three, four and five years. Since then, the market quotes have slowly but surely advanced to their present positions of strength. Local dealers hold out little hope for a reversal of the present situation, noting that until supply is back to its former level, demand will continue to hold the market to a rigid foreward position.

Pepper—Prices receded from peaks reached two weeks ago following reports of a "cease fire" in the Suez area. The reaction was modest and not altogether unexpected, in view of the previous steep advance. However, the market still faces a number of problems, according to one major dealer, which should tend to restrain the reaction. Primarily, the tension which precipitated the action in the Middle East has not been resolved. Second, the Canal is still, and will be for some little time, blocked. Thus, steamers that were scheduled to arrive from the fifteenth of November, through the early part of December, will have to come around the cape, causing delays of from two to three weeks. There are possibilities that freight rates from the East will advance because of this change of routing. Imports at spot were said to be about five percent above those of last year.

During the period of advance, a good portion of the white pepper afloat were committed. The total movement was not quite as broad as that in black and the subsequent decline was limited to fractions. Shipment levels are steady.

Efforts to buy newcrop Japanese red peppers under the full levels asked abroad have reportedly been fruitless, one dealer claimed.

Health News Institute Sets Up Subcommittees

The health news institute has set up nine operating subcommittes. Announcement of the formation of the committees was given by Chet Shaw, executive vice-president, at a recent meeting of the general advisory committe of the institute at the Savoy-Plaza hotel, New York.

G. Fred Roll, of Smith, Kline & French Laboratories, Philadelphia, has been named chairman of the subcommittee on films, radio and television. Other committes are:—

Aid to Pharmacy; Edgar S. Bellis, of National Association of Retail Manufacturers, chairman.

Fact Book; Wallace S. Sims, of Pitman Moore Company, Indianapolis, Ind., chairman.

Booklets and Pamphlets; Charles H. Prout, Mead Johnson & Co., Evansville, Ind., chairman.

Schools and Colleges; James R. Beattie, Ciba Pharmaceutical Products, Inc., Summit, N. J., chairman.

Recruitment of Scientific Personnel; George Weiler, Chas. Pfizer & Co., Brooklyn, N. Y., chairman.

Professional Liaison; John F. Modrall, of Eli Lilly & Co., Indianapolis, chairman.

Pharmaceutical Liaison; Dr. Howard A. Prentice, of the Proprietary Association, chairman.

Ideas and Development; Robert A. Hardt, of Hoffmann-LaRoche, Inc., Nutley, N. J., chairman.

Dyestuff Works in India Marketing Blues, Greens

Indian Dyestuff Industries, Ltd., Bombay, India, began production in April, 1956, as a manufacturer of vat dyestuffs, according to the Department of Commerce.

The factory's monthly production capacity is about 7,500 pounds of jade green, 2,000 pounds of dark blue BO, and 2,000 pounds of black BB. Currently, the factory is producing at about one-third of capacity. Full capacity is expected to be reached in six months.

The company has placed on the market "Indovat" dark blue BO ultraconcentrated and "Indovat" jade green, and intends to market two other vat dyes, "Indovat" blue and "Indovat" black BB.

On the basis of its production capacity, the factory's annual consumption of anthraquinone, principal raw material used, is 200 tons a year, now imported from the United Kingdom and Western Euorpe.

Socony, L. Sonneborn In Israel Transaction

Socony Mobil Oil Company, New York, has announced the sale of the business of Mobil Oil Israel, Ltd., an affiliate, to L. Sonneborn & Sons, New York. The transaction becomes effective December 31.

Sonneborn plans to expand the company's business, which is the marketing of a full line of petroleum products in Israel. The present employees of Mobil Oil Israel are expected to be retained.

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THIS practical guidebook acquaints you with the factors bringing about the industrial waste problem, the responsibilities of the plant owner, the legal factors involved, advantages of employing a competent technician to assist in assembling essential data, and the need for cooperation between enforcing agencies, industrialist, and consulting specialist.

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The book covers the physical, biological, chemical, filtration, digestion, sludge, drying and utilization methods, explaining the advantages of each, and charges related to treatment. The economical considerations in design, construction, and operation of low-cost plants are presented. Reuse of by-products of the treatment is explained, with specific examples showing some waste from which values may be recovered,... thereby reducing cost of treatment.

LOOK OVER THE CONTENTS
1. What Constitutes a Waste Problem?
2. Who Starts a Waste-treatment Problem?
3. The First Steps to Take in the Solution
4. The Place of the Engineer or Specialist
5. Cooperation between Enforcing Agencies, Industrialist, and Technician
6. Factors in the Solution of a Waste Problem
7. The Interests Concerned in Industrial-waste Problems
8. Districts for Industrial-waste Treatment
9. Sampling and Analysis of Wastes
10. Combining Wastes from Several Plants to Reduce Costs
11. The Pollutional Effect of Various Wastes
12. Methods of Waste Treatment
13. Equipment for Waste Treatment and Its Selection
14. Coagulants and Chemicals
15. Handling Industrial Wastes in Municipal Systems and Charges Therefor
16. Factors in the Development of Low-cost Plants
17. Reuse of Wastes and Recovery of Values
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NPVLA Convention Report

Paint Manufacturers Warned to Be Alert

—Continued from page 3

successfully capture the time and attention" of the prospect.

"Furthermore," he continued, "it's also becoming more expensive. This places a bigger burden on each ad in terms of effectiveness. Research can unquestionably help in making advertising more effective."

Paint manufacturers were called upon by some of their best customers—the automobile, furniture and appliance industries—for help in improving finishing systems.

The automobile industry, which last year used some 50 million gallons of paint materials, has two major weak spots in its finishing systems, according to Ralph J. Wirshing, head of the chemistry department for General Motors Corporation.

"The first," he explained, "is failure of the film itself, due to weathering, and the second is corrosion of the metal brought about by rupture of the film."

In addition, Mr. Wirshing said, automobile makers are interested in faster drying paint materials, non-sanding undercoats, water emulsion finishes to eliminate fire hazards and better filling undercoats.

The furniture industry, reported G. Maurice Hill, vice-president of Drexel Furniture Company, is looking for help in these six areas:

• **Color**—Stains, as well as other color applications tend to change color with age. More research is needed to improve color stability of these materials.

• **Sealers**—Presently used sealers act as good fast drying sanding coaters, but have little true sealing value. They are penetrated, softened and reswelled by lacquer topcoats, and therefore, add little to filling and leveling. Good intercoat adhesion, toughness, and check resistance are also very essential and need to be improved.

• **Filler**—There has long been the need for a filler less sensitive to solvent attack—to prevent or reduce swelling and reshrink, and subdue pinholing on very porous woods. There is a need for better adhesive qualities in fillers.

• **Glaze**—There is a great need for glazes that will give better intercoat adhesion, but without loss of other exacting performance requirements.

• **Lacquers**—An important objective is to improve long range adhesion, elasticity, check-resistance and better resistance against such things as alcohol and water.

• **Synthetics**—Synthetics, although they have come qualities better than lacquer, continue to lack one important quality—little resistance to water. Synthetics do not have the working properties that lacquers have for general furniture finishing.

The present organic finishes used by appliance makers need improvement in seven major respects, said E. L. Faneuf, manager of chemical and ceramic research for Whirlpool-Seeger Corporation.

They are color stability, heat stability, mar and scuff resistance, alkali resistance, abrasion resistance, stain resistance and corrosion resistance.

Text of Mr. Battley's Address

Following are excerpts from the address delivered last week by Joseph F. Battley, president of the National Paint, Varnish and Lacquer Association, before NPVLA's sixty-ninth annual convention in Los Angeles.

I am happy and privileged to welcome you, the members of the National Paint, Varnish and Lacquer Association and our guests from other nations and related industry groups, to the sixty-ninth annual convention of the association.

* * *

America today is at a crucial turning point in its destiny. A short month ago we could look to a mushrooming economy. That picture is now beclouded by the possibility of our involvement in the bitterness of the mideast troubles. Nevertheless, the paint and chemical coating industry of America will play a significant role in America's future—peace or war.

* * *

New peaks in other industries sales were reached during 1956. But, while our total sales for the first nine months were one billion, two hundred twenty-one million, three hundred fifty-five thousand dollars ($1,221,355,000), a gain of 1 percent over the similar period in 1955, and the establishment of another dollar sales record, of most importance is the fact that our production volume has decreased. That is the danger sign to me.

In perspective, you must recognize these points from any sales figures. First, while your total sales may be at the highest point in your history, you are practically standing still when comparative trends show your markets are being lost to other industries.

No Excuse for Seasonal Drop

Second, don't dismiss a drop in your sales as due to our traditional, seasonal trend. That is no excuse any more, with our modern paint products. Finally, we all know that our sales dollar business has increased very appreciably.

We have, therefore, the assurance of another new sales dollar record year for 1956. But that record of sales dollars—comparatively speaking—will not mean you are progressing unless we can also change these facts.

In 1947, our sales represented one-half of 1 percent of the gross national product. In 1955, they have dropped to four-tenths of 1 percent—a drop of considerable magnitude and one that clearly indicates the extent of the potential markets we have lost. We must stop pitting paints against paints and start to compete against those products replacing ours in homes and other products.

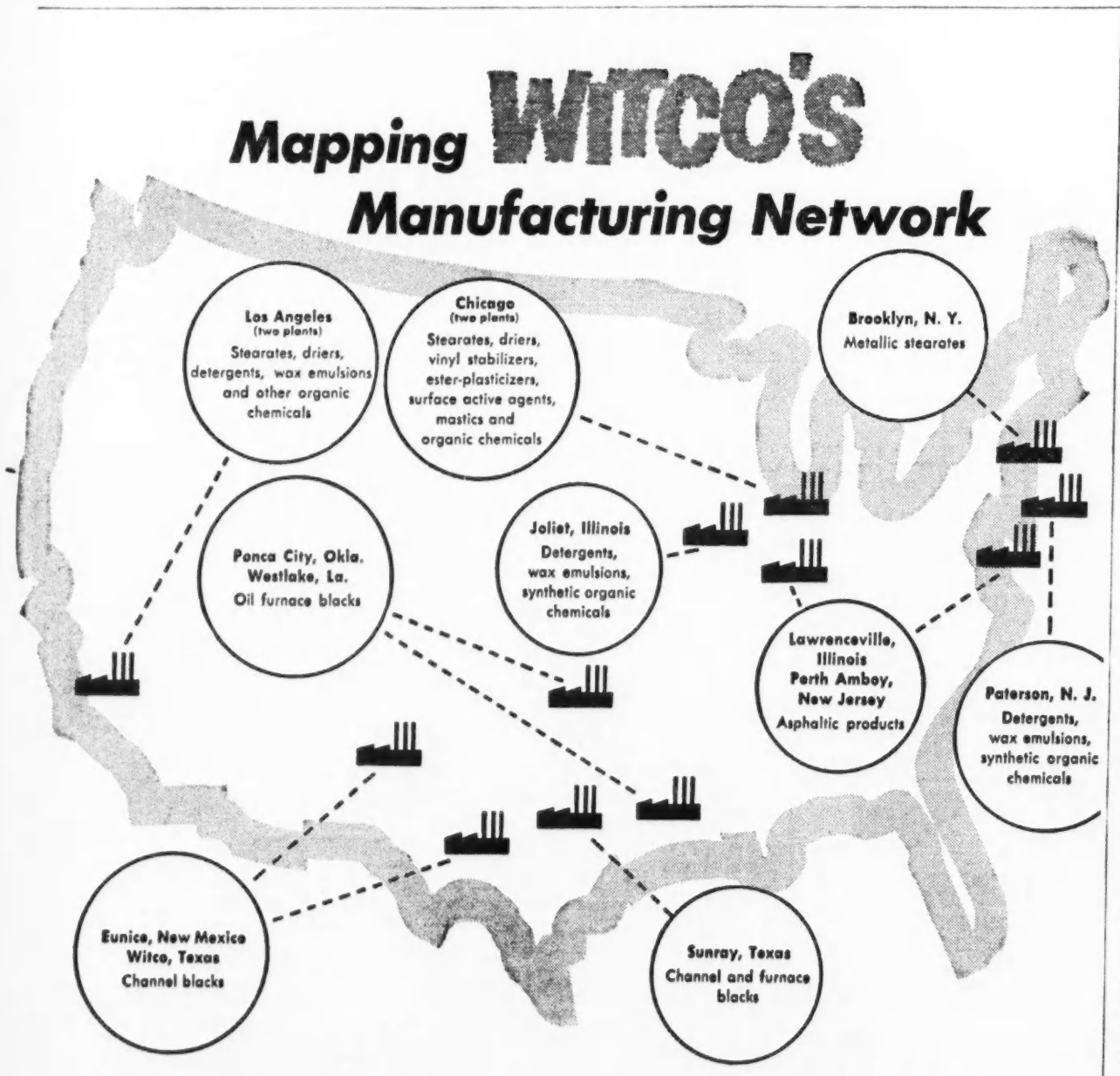
You can expect government procurement during fiscal 1957 to improve, in both paint volume purchases and in procedures. I must again insert a word of caution. Procurement for the military services beginning next month will be handled differently and more efficiently. Those of you who sell to the government can expect to be penalized for delays in delivery and failure to meet exacting specifications, and related requirements. You must understand that the new military procurement organization will be buying more paints than ever before and that their plans are now perfected to assure that each service will receive the quality desired and when they want it.

Result of Presidential Drive

This plan is the result of the President's intensive drive to reduce federal warehousing and inventories. "Call Type" contracts will be used more and qualified bidders will be listed on performance. Our staff has met with these officers and succeeded in having this new procurement procedure made specific as to quantity and delivery periods. It's up to you to see that this industry meets or surpasses all demands of our government for our products.

Association membership gains during the past fiscal year reflect the general health of the industry and the increased value of our association's services. We had a net increase of forty-two members. There are still three or four large and medium sized manufacturers of paints and raw materials that enjoy all the benefits of your coordinated and cooperative efforts but do not participate. I can assure you that they have never advanced one valid reason for not joining with us in working for the good of our great industry.

There are several problems we will have to solve during the next year. In my message to the Federation of Paint and Varnish Production Clubs this year I stressed the need for recruiting more and more technical men and women to insure the continued progress of our industry. The



Witco, and its affiliated companies, now operate a network of 14 plants, manufacturing a variety of chemicals and chemical products for a host of industries – including paint, rubber, lubricants, printing inks, plastics, cosmetics, drugs, foods, construction, textiles and paper.

Witco also maintains research and technical service laboratories in Chicago, Brooklyn, Akron and Amarillo.

Witco's 35-year history has been one of expansion, to keep pace with customers' needs, and diversification into related chemical industries.

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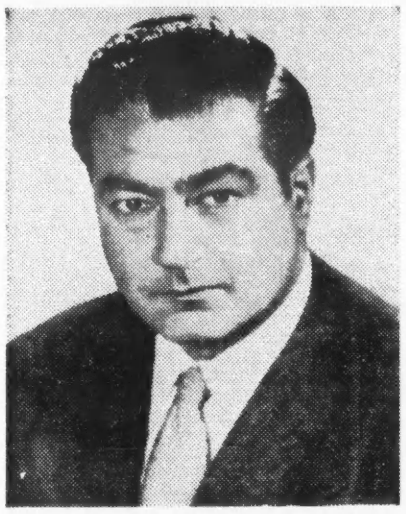

NPVLA VICE-PRESIDENT: Leo S. Guthman, president of Bradley & Vrooman Company, Chicago, who was re-elected to a one-year term as vice-president of the National Paint, Varnish and Lacquer Association.

federation's sponsorship of various educational courses and yearly scholarship and research awards has been a splendid program, but I felt that it should be supplemented by a three-fold program if we are to find the potentially scientific-minded student that we must have.

How to Recruit Technical Men

First, I proposed systematic and thorough screening of all our young people in grade schools to locate potential, but latent creative talent; second, that we must employ sufficient, competent and dedicated instructors at much better salaries to afford every qualified young man and woman the opportunity to develop their potential technical capabilities; and third, that we should support adequate school and college technical and laboratory facilities for this purpose.

This work must be done in each community by those of this industry who live in the community. I firmly believe that in the future, the achievements and progress in any students' academic education, whether high school, college or post-graduate, is a real responsibility of all of us. We need these trained men for the progress of our industry. But more than having another industry taking our markets because we lack technical developments, we cannot permit another country to better our technical know-how or initiative. When we do, we'll no longer live in a free world.

At the retailers and salesmen's annual meetings in Chicago I stressed four programs that they, and they alone, can and should do. First, I explained that with the time payment program promoted by the joint industry coordinating committee, manufacturers, retailers and painting contractors now have a progressive merchandising "key" that will open additional doors for more sales, but they must be saleswise, dollar-wise and volume-wise in learning its proper use. They must know their suppliers products, particularly our newest and latest developments. I explained why they need not be technicians, but must be able to translate technical terms into language that their customers can understand.

Paint Clerks Must Be Trained

That brought up my second and most important point—which is; they must see that their clerks are properly trained to sell our paints and accessory or sundries products. The importance of this was stressed more than any others because I firmly believe the most critical need in the selling end of our business is to have well trained clerks in the paint dealers stores.

Not a day passes without additional complaints that retail paint clerks have almost a complete lack of information about our modern paints, they can't answer intelligently a customer's questions about emulsions or alkyds or latex or chalking or non-chalking paints or furnish useful information on any other new paint products, even those which are well advertised to bring traffic to their stores.

Third, I urged them to support fully every community improvement type of program—regardless of its name—and to back it in every possible way, because each one presents a paint sale potential, such as "Keep America Beautiful" "Operation Home Improvement," "A-C-T-I-O-N" and, of course, "Clean Up—Paint Up—Fix Up." These campaigns should also receive the active support of every other member of the paint industry. They sell paint for us.

I would like to cite just one example of the benefit you can receive from these community programs. This year Philadelphia had a month-long Clean up—Paint up—Fix up program, and, as a result, eighty thousand houses were newly painted to some degree on the outside and seven hundred and fifty thousand paint jobs completed on homes and buildings, inside or out. That's big business no matter how you look at it—over two and three-quarter ($2^{3}/_{4}$) millions of dollars were spent on these jobs. Similar results can be accomplished proportionately in any community with a well supported campaign.

Competition Must Be Met With Facts

Fourth, I told them that they, as the personal contacts with the users of our products must meet the inroads of competitive surface coverings with well-supported facts. These competitive coverings are products advertised with a "Catch-All" phrase, such as "Never Needs Painting," "No Painting Maintenance Costs." But what we—the paint, varnish and lacquer industry—have failed to say is that instead of inexpensive repainting, such products need EXPENSIVE REPLACEMENT at unpredictable short periods. The menaces of accidents, grease, dents, pits, corrosive action and weathering cause costly REPLACEMENT MAINTENANCE.

I told them what it cost to remove one of the so-called "Guaranteed-For-Life-Time" mastic jobs, when the material started deteriorating, so we could make it a house beautiful again with a good paint job. I told them that was why we had

—Continued on page 78

Papers by FPVPC Affiliated Clubs

These technical papers were presented by affiliated clubs of the Federation of Paint and Varnish Production Clubs at the federation's thirty-fourth annual meeting in Cincinnati, Ohio, last month.

Factors Affecting Freeze-thaw Stability Tests of Latex Paints

Louisville Club

Because of the wide-spread use of latex paints, it has become necessary for the development chemist to have a controlled method of freeze-thaw test, rather than a haphazard one. He needs to understand the variables that affect his testing methods in order to have a true picture of the performance to be gotten from his product when variable, but damaging, freezing conditions are encountered.

Accordingly, the object of this year's work by the Louisville Club was to determine the effect of package size in freezing tests, the effect of temperature of freeze, and the effect of the freeze rate.

Paints Tested

Paints involved in these tests were:—

1. A commercial polyvinyl aceta e paint

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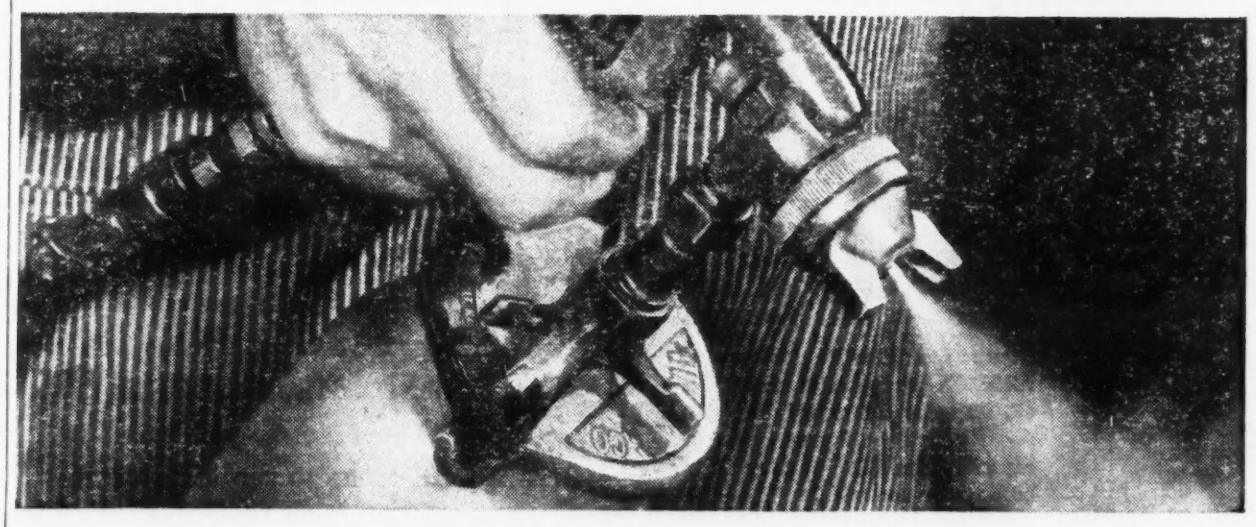

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known to have excellent freeze-thaw stability.

2. A paint known to have borderline acceptability with respect to freeze-thaw tests. This paint differed from the above in that it was made with a different homopolymer polyvinyl acetate.

3. A paint of known poor freeze-thaw stability.

4. A commercial acrylic latex paint.

5. A commercial butadiene/styrene latex paint known to pass four cycles of freeze-thaw.

6. A polyvinyl acetate paint of commerce known to develop seeding in four cycles of freeze-thaw.

To paints 2, 3, and 4, ethyleneglycol and an anionic wetting agent were added to improve their freeze-thaw characteristics, and these modifications were included in the series of tests.

Freeze-thaw tests were run on package sizes of one-half pint, quart, gallon and five-gallon for each paint in special equipment for measuring time-temperature data.

From the series of tests and measurements, it was found that:

1. Package size, of i self, did not constitute a significant factor in the freezing tests conducted on three polyvinyl acetate paints.

2. Temperature of freeze was found to be an important factor in the outcome of the freeze-thaw tests conducted on a variety of latex paints. The lower the freezing temperature, the greater the paint damage. The higher the freeze temperature, the better the paint performance. Freeze-thaw tests should have an adequately low temperature to be truly informative.

3. Rate of freeze was not a significant factor in the outcome of the freeze-thaw tests. This factor does not have the importance that the freezer temperature has.

4. Freeze-thaw tests should be conducted in such a way that one is sure the paints have reached the lowest temperature (freezer temperature).

5. Paints should not be stirred between cycles if the worst outcome achievable is sought.

6. Further study is needed on the duration of freeze as a factor of significance in freeze-thaw tests.

Search for an Incompatibility Test

Cleveland Club

The Cleveland Club set out on a project of studying the effect of incompatibility on film properties. Preliminary discussion showed that it was first necessary to define incompatibility as applied to the project, and then to devise a suitable method of test for film incompatibility, because a search of the literature showed no such available test method which could be considered adequate.

Accordingly, this paper is in the nature of a progress report in the club's effort to devise suitable methods of test.

From the preliminary work done thus far, tentative conclusions in the nature of a progress report were drawn as follows:—

1. There appears to be a relationship between deviation from exponential dependence of transmittance of solutions on concentration and compatibility.

2. Visual methods are helpful if films are examined by direct and transmitted light. Transmitted light is somewhat more sensitive.

3. Densitometric measurements give quantitative relationships between incompatibility and light transmission, but are not as sensitive as an examination of scattered light.

4. Photomicrographs are useful in the case of gross incompatibility such as that caused by lack of solvent tolerance.

5. Cases of gross incompatibility may be mistaken for compatibility or slight incompatibility because they develop macrostructures, and therefore, do not scatter or absorb light.

Fire Retardant Paints: III Chlorinated Alkyd Paint Systems

Baltimore Club

The third annual report of the Baltimore Club on fire retardant paints has to do with the fire retardancy of various pigmentations of a chlorinated alkyd resin vehicle.

The vehicle used in this work was an alkyd resin consisting of 41 percent linseed oil, 19 percent tetrachlorophthalic anhydride and 40 percent xylene solvent. It was esterified to a "U" viscosity on the Gardner-Holdt tubes, and was made at 60 percent solids.

From this vehicle, four basic paint pigmentations were made at a 40 percent pigment, 60 percent alkyd solution vehicle content: These pigmentations were 50/50 mixtures of the following: titanium dioxide/talc; antimony oxide/talc; barium sulfate/talc; zinc borate/talc. A fifth paint consisted of a 50/50 titanium dioxide/talc pigmentation of urea-formaldehyde solution as the vehicle. These five paints were then blended in varying ratios so that composite effects of pigmentations and vehicle composition could be studied.

For evaluating the fire retardant properties of the blended paints, the Stick and Wick test as described in ASTM D 1361-55T was used. From these evaluation tests the following conclusions were drawn:

Conclusions of Evaluation Tests

1. The optimum concentration of antimony oxide in a chlorinated alkyd titanium dioxide/antimony oxide finished paint is about 20 percent.

2. The addition of barium sulfate to an antimony oxide paint system in chlorinated alkyd resin does not materially improve fire retardancy.

3. Comparable fire retardancy is obtained when 5 percent zinc borate and 15 percent antimony oxide is used in place of 20 percent antimony oxide in chlorinated alkyd paint systems.

4. Pigmentations based essentially on zinc borate as the fire retardant pigment give erratic results.

5. Nitrogenous resins such as urea-formaldehyde have very little fire retardancy effect.

A Method of Determining Brushability by Instrumentation

New England Club

The evaluation of the brushability of a paint by having various individuals brush it out and subjectively rate it is subject to wide differences of opinion and is generally unsatisfactory. Attempts have been made to eliminate the personal factor by instrumentation.

A consideration of the requirements of a proper instrument for measuring brushability was felt to demand the following characteristics:

1. The instrument must produce as nearly as possible, the same shearing action on paint as is produced in brushing.

2. The instrument must be low in cost, so that it can be widely utilized by all companies, large and small.

3. The instrument must be easy to operate and maintain.

4. The instrument must give accurate results that can be easily reproduced in different laboratories.

In view of these requirements, the Asbeck, Laidermann, Van Loo instrument was selected for study. Calculations made by the inventors indicated that shear velocities in the range of 12,000 to 35,000 reciprocal seconds are obtained in a paint subject to brushing.

Paints were rated in ease of brushing by the amount of breakdown in the 12,000 to 35,000 reciprocal second range. A paint with a curve having the lowest viscosity at this range would have the best brushing, while the paint with the highest viscosity in the range would be the poorest.

Deterioration of Protective Coatings Due to Mold and Bacteria

Chicago Club

This is essentially a compilation of the results of studies made by others on the problem of mold infection of paint films. It is bibliographic, describing the work of others, but does not clutter up the report with bibliographic notations. Its purpose

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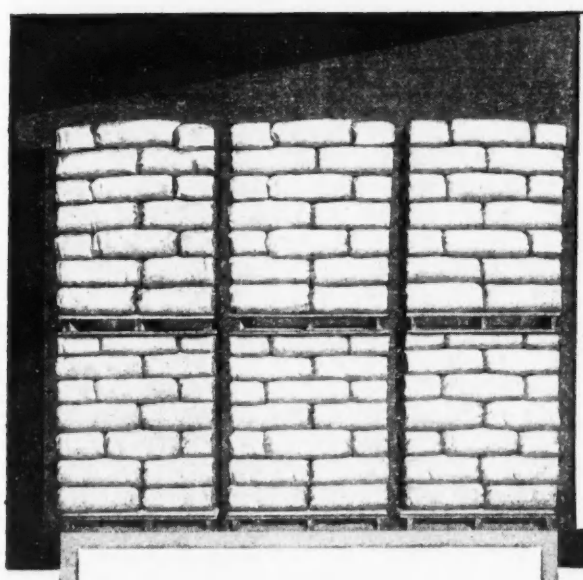

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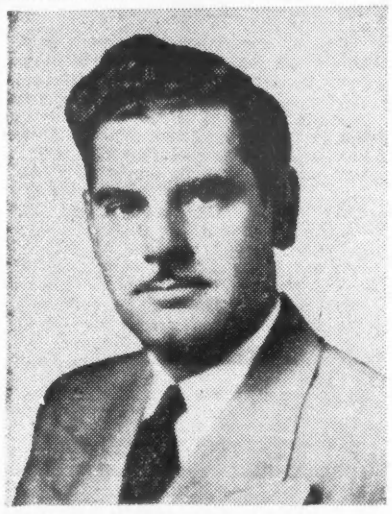


NPVLA TREASURER: H. Braith Davis, president of the H. B. Davis Company, Baltimore, Md., who was elected for another year as treasurer of the National Paint, Varnish and Lacquer Association.

is to make available in one reference, the existing data on the subject. Since the literature has been summarized and reviewed previously, the references in this Chicago Club report deal mostly with the information published since 1947.

One of the main observations to be gleaned from the abstracted data is that there is wide and considerable differences of opinion among the authors as to the nature of the problem, the best methods of test and the best solution to the problem. Improved methods of determining between mold discoloration and dirt collection on paint films, has awakened the industry to the great extensive nature of the problem, and the fact that what had for many years been passed off lightly as dirt collection, is in fact primarily mildew growth.

In the area of simple definitions on the subject there is disagreement and, accordingly, the following definition of terms has been proposed to ASTM:

Micro-organism—Use as a general term to include bacteria and fungi.

Mold—All fungi growing on paint.

Bacteria—All bacteria growing on paint.

Preservative—Any material added to paint for controlling micro-organism growth.

Methods of Test

Another subject of wide disagreement is the method of testing a chemical preservative to determine its effectiveness. The proponents of laboratory testing by accelerated methods point out the quick results and control over many variables. Others claim that the only true test is in paint products meeting customer approval and acclaim. Laboratory testers themselves disagree as to methods. Some prefer culture developed organisms on agar plate cultures. Others claim only paint panel testing is sufficient, in actual outdoor exposure.

Outdoor exposures, however, are subject to many limitations among which are such factors as the fact that they are made on new wood, prepared in a relatively clean place, and allowed to dry before exposure. Results of test fence exposures are good only for the location of the fence area and climate, and give no indication of how the paint will perform elsewhere.

Variable Conditions

A paint that performs well on a test fence might not stand up under a virulent attack from a badly infected substrate. Paint inoculated by air-borne spores while the film is wet needs much greater protection than paint on a dried test panel.

While the infecting organisms are common in most localities, air-borne nourishment, temperature and moisture conditions vary widely from one geographic location to another. This poses an economic problem to the paint manufacturer. Should he put in enough preservative to protect his paint in the worst possible locality in which it might be used—a high-cost operation—or should he have different formula amounts for paint shipped to different localities?

Identification of Infection

For the chemist the problem of mold growth on paint films is largely one of identification. Fungal attack can usually be detected in the field without positive identification, if these factors prevail:—

1. Darkened surface or discoloration. Usually black or brown, but may also be red, blue, green, or even white when large accumulation of mycelia covers the surface. The color in most cases comes from spores and dirt held by mycelia.

2. Under low power magnification, mycelia may be observed and the uniform nature of spores will be noted. Whereas dirt is randomly distributed over the surface, mold spores are growing in colonies, and are uniform in color and intensity of distribtuion on any given small area.

3. The discoloration is not easily washed off with water.

4. The discoloration is easily bleached out when treated with a household bleach, such as a 5 percent sodium hypochlorite solution.

A large variety of species of mold infect interior painted surfaces, especially in industrial areas where conditions of temperature, humidity, and nourishment are right. To combat these infections, it is frequently imperative to have positive identification of the species in order to select intelligently a preservative to combat it. Some molds, according to recent work done in Canada, will develop a resistance to a given preservative which killed the first strain, and the second strain takes over, requiring a different chemical to kill it.

Generally speaking, painted surfaces which become moldy would be even more severely infected if they were not painted. This points up the fact that in house construction lumber should be used which has not been out in the weather or been stored in damp or swampy areas. Homes are being built today in areas that were once swamp lands, from lumber that is infected with bacteria and mold spores. An infected substrate cannot be coated satisfactorily until it has been disinfected.

Preservative Treatment for Lumber

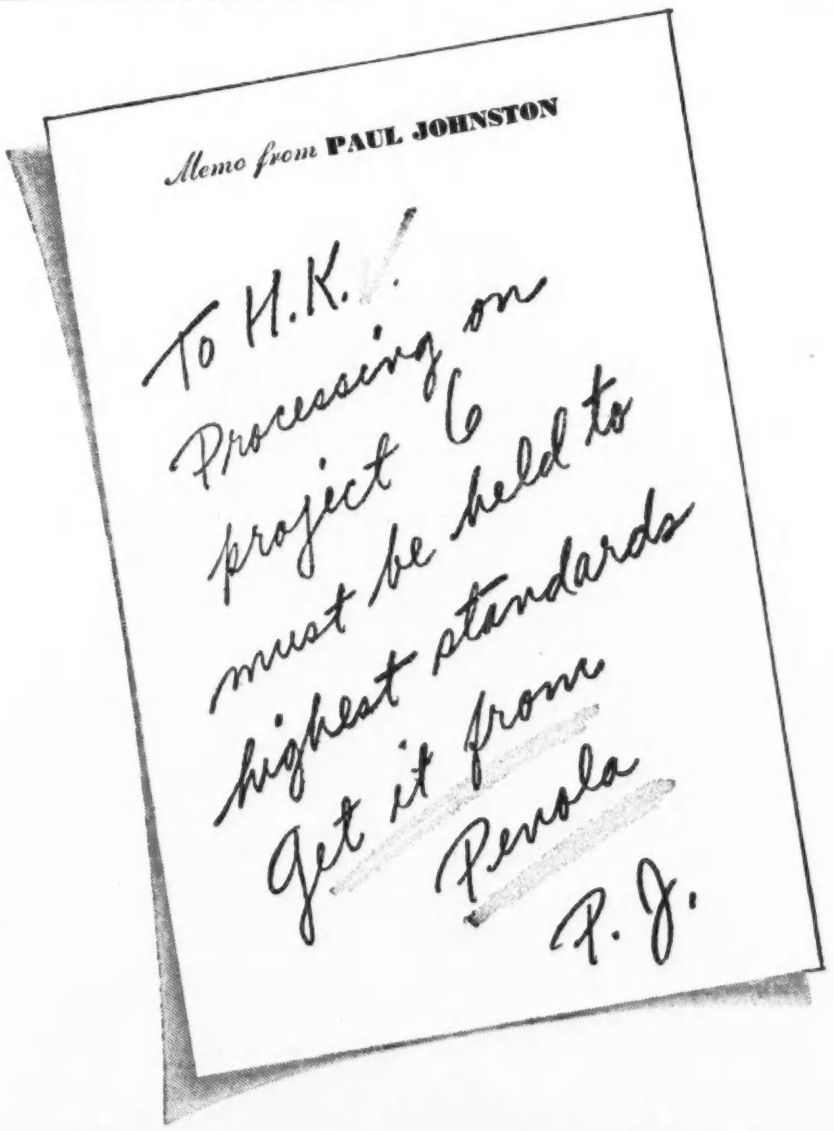
The lumber industry is developing a waterproofing and preservative treatment for lumber. Applied at the mill it would only add about $100 extra cost to the lumber used in the average small house. If used effectively, and successfully, this operation could minimize mold growth and perhaps eliminate some of the paint blistering problems.

Proper preparation of moldy painted surfaces, or surfaces to be painted should be emphasized. Wash preparations of a detergent type containing sodium hypochlorite or sodium pentachlorophenate will do much to prepare the surface for successful recoating. Porous surfaces wherein spores have penetrated should be treated with an alcohol or solvent solution of a good preservative.

Formulation Factors

After a paint film has cured it attains its highest order of resistance to mold infection. As it weathers and the film begins to deteriorate it tends to collect some dirt and to allow some moisture penetration. Molds can then establish food channels and canals by sending their enzymes into the paint film to convert it to digestable nourishment.

Soft oils such as linseed and soya produce films more subject to attack than hard drying oils, such as tung. Hardening a film with certain resins will improve mildew resistance, but often at the sacrifice of other desirable properties. Pigments have an important effect in mildew growth inhibition. Zinc oxide tends to harden paint films making them less subject to attack, and it also has an inhibiting effect on the enzymes secreted by the fungi. When their food supply is cut off, the infecting organisms cannot mature and reproduce. Some of the organic toners are effective. Inert pigments have



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definite effects on mildew resistance, but the role of different inerts is subject to wide differences of opinion.

Chemical additives to control or deter mold growth is one of the best avenues of attack against infection. Their use is not as simple as it might appear. Results obtained in the northeastern states are quite different than those obtained in the humid south. The change of one variable can change the entire result.

One Formulation No Final Answer

Some researchers claim that the substrate is critical, while others say it is of no significance. Test fence exposure is different from field experience. Protection for short exposure does not mean that the paint will not later become heavily infected. A formulation may work well for several years and suddenly be subject to a profusion of infections because the environment has changed. No single formulation is ever the final answer.

The Industrial Fungicides Catalog lists over fifty zinc compounds, over thirty copper compounds, around eighty-five mercury compounds, and over 150 other assorted materials being used or offered to combat molds. Not all of these are eligible for paint use. Many are under study. For suitable use in paint the chemical preservative must be compatible with the vehicle, retain its toxicity both in the package and in the dried film for the life of the paint, and have no adverse effects on chemical and physical film properties.

Mercury compounds were among the first used, and are among the most widely used. The mercuric chloride originally used has given way to the less toxic and safer organic phenyl mercury compounds. Even between these there is a divergence of performance and action.

Phenyl mercuric oleate and phenyl mercuric acetate are currently widely used in paint manufacture. The oleate is not water soluble and stays in the paint film distributed uniformly. The acetate is water soluble and tends to leach to the paint surface where it keeps a constant source of mercury at the surface for protection. Some chemists favor one type of action, and other chemists favor the other. Mercury compounds are toxic and therefore subject to considerable restriction and regulation in paint use.

Copper 8-quinolinolate is used in paints and is not toxic to humans. However its paint use is limited because of its adverse effect on color and drying. Chlorinated phenols are effective mold control agents, but are considered less effective than the mercurials. Their sodium salts are effective preservatives in emulsion paint systems. They tend to detract from the exterior durability of paint films. Salicylanilide has about the same effectiveness as tetrachlorophenol, but has poor color and cannot be used in white paints.

N-trichloromethylmercapto-4-cyclohexene-1,2-dicarboximide is a colorless and initially effective agent that seems to lose its potency before the life span of the paint film has expired.

Extender Pigments in Blister Resistant House Paints

Northwestern Club

Magnesium silicate, being the most widely used extender pigment in blister resistant house paints, the Northwestern Club set out to evaluate various other extender pigments in comparison with it, at the same pigment volume concentrations. Paints were made up at 20 percent, 30 percent and 40 percent pigment volume concentration with individual extenders, and compared against TT-P-102, Class B, paint as a control.

Methods of Test

The paints were tested in an ADM blister box, and were also subjected to weatherometer exposure in a twin arc weatherometer. The complete blister resistance test series were run independently in two different laboratories.

The following schedule was used in the blister tests:

1. First coat applied to cedar panel.
2. After three days drying the second coat was applied.
3. After five days drying, panels were placed in the weatherometer.
4. After one hundred hours in the weatherometer, panels were placed on the blister box after it had been operating at 130°F. with dummy panels.
5. After three days on the blister box

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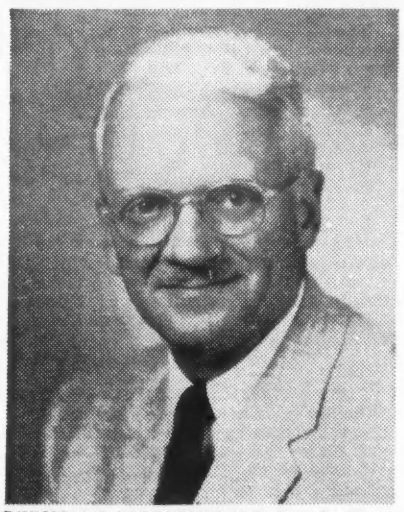

DIVISIONAL VICE-PRESIDENT: Don T. Barnes of Hansen Glass & Paint Company, Sioux City, Iowa, who was elected divisional vice-president of National Paint, Varnish and Lacquer Association representing its wholesale-distributors divsion.

the panels were inspected for blister resistance and cracking.

Weatherometer tests were run on cedar panels of the paints for 550 hours.

The following extender pigments were studied for blister resistance and weatherometer durability in paints at three different pigment volume concentrations: Precipitated calcium carbonate, natural dry ground calcium carbonate, fine ground and also medium coarse magnesium silicate, diatomaceous silica, aluminum silicate, mica of 325 mesh, barytes, calcium silicate, diatomaceous calcite and calcium sulfate as it is present in titanium-calcium pigment.

Conclusions

1. None of the extender pigments, tested as such, adversely affected blister resistance.

2. With the exception of diatomaceous calcite and coarse calcium carbonate, all 40 percent pigment volume concentration paints tended to crack under the severe blistering conditions of this test.

3. As the pigment volume concentration increased, checking decreased, cracking increased, color retention decreased and chalking increased.

4. The calcium-based extenders, such as the sulfate, silicate and carbonate, showed very good color retention and resistance to cracking and chalking. They are inclined to check.

5. Coarse magnesium silicate and mica are slightly poorer in color retention, but all other properties are excellent.

6. A blend of extender pigments would be desirable to achieve optimum properties.

Exposure Characteristics of Clear Finishes for Exterior Wood Surfaces

Golden Gate Club

Research work directed toward the evaluation of various types of exterior clear coatings from a durability standpoint, together with possible improved durability obtainable with additive agents, was launched by the Golden Gate Club. Two- and three-coat systems of twenty-six different vehicles were put on exposure at the following sites: Cloverdale, Calif.; Long Beach, Calif.; Tulsa, Okla.; Sayville, L. I., and Portland, Ore.

Exposure panels made of clear redwood, red cedar and white pine were prepared according to the best acceptable practice and sent to the various locations for exposure tests. The tests to date have been running for one year, and this report is in the nature of a progress report.

The poorer finishes have failed, particularly at Cloverdale which because of location and weather conditions represents somewhat of an accelerated test. But the real interesting part of this work will be reported following another year of continued exposure, where the finishes that now still look good, will have proven whether or not they are among the best.

Varnishes Tested

Placed on exposure were the following types of varnish or clear finish products:

1. Boiled linseed oil.

2. Boiled linseed oil to which light stabilizers, a low pigmented iron oxide

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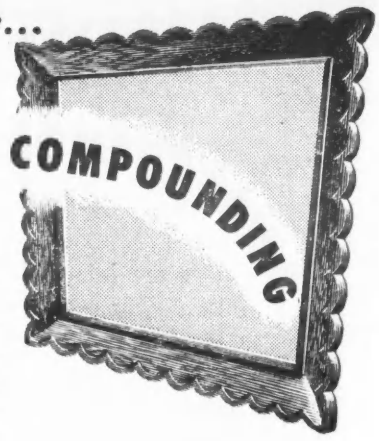

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stain, mildewcide, and colloidal iron were added.

3. A chemically modified proprietary commercial linseed oil.

4. A meleated soybean oil.

5. A cyclopentadiene modified linseed oil containing additives such as a mildewcide, light stabilizers, colloidal iron and an iron oxide stain as first coat.

6. A thirty-three-gallon pure p-phenyl phenolic/tung oil varnish with the above-mentioned additives.

7. A sixty-gallon pure p-phenyl phenolic/tung-linseed oil varnish.

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25. A silicone alkyd resin.

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4. The modification of vehicles with silicone resins detracts from the durability of longer lasting varnishes such as the long-oil alkyd resins.

5. So far, the alkyds are the most durable finishes in the series, and longer exposure is necessary to determine to what extent they are benefited by the additives used in the series. It is definitely established at this point that the use of a very low iron oxide pigmented stain of the varnish, as a first coat, improved durability characteristics. No advantage for the colloidal iron oxide in topcoats has as yet been established.

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2. Pentaerythritol rosin ester/tung oil varnish meeting specification TT-V-71-D.

3. Twenty-five percent phthalic anhydride alkyd resin meeting specification TTR-266, Type II, Class A.

4. Thirty-five percent phthalic anhydride alkyd resin meeting specification TTR-266, Type III. These vehicles were adjusted to 50 percent solids content and driers suitably added.

Methods of Test

The eight commercially available anti-skinning agents were incorporated in the vehicles at five different concentration levels, representing 1/16, ⅛, ¼, ½ and 1 percent of the non-volatile vehicle. These were tested in both half filled and in full, open and closed containers. The anti-skinning agents in correct proportion were mixed into the vehicle and allowed to stand sixty hours as a "sweat-in" period before beginning the test.

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5. Butyraldoxime solution.
6. Ketoxime solution.
7. Methylethyl ketoxime.
8. Mixed amyl phenols.

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It is therefore obvious that the thin fil evaporator, as its name implies, measure the evaporation of a volatile solve spread in a thin film, which is in prin ciple similar to the conditions of surfac areas and solvent volume encountere with an applied paint film.

The complete method of test, detaile procedures, controlled conditions, calcu lations, and data required are set fort in the paper.

Six cooperating laboratories ran r peated tests on toluene, xylene, VM& naphtha, mineral spirits, cumene an odorless mineral spirits. The repea ability of results overall by this metho was concluded to be on the order of 1 percent, in either direction.

Hydrogen Sulfide Blackening of Exterior White House Paints

Pittsburgh Club

The darkening or blackening of pai films in an atmosphere containing hydr gen sulfide is a well known reaction. Th discoloration is the result of the formatic of lead sulfide by the reaction of hydroge sulfide present in the air, with lead-co

taining compounds (pigments or driers) in the paint. It is an interesting fact, however, that the mere presence of hydrogen sulfide in the air, and lead pigments in the paint, will not necessarily produce a discoloration sufficient to be objectionable. Accordingly, the purpose of this study is to observe the atmospheric conditions which promote blackening, as well as variables in paint formulation which will increase, diminish, or eliminate the effect of these conditions.

Why the Problem?

There are two primary factors which are behind the annual complaints received on this type of problem. One is the fact that there are still a lot of people who believe that good white house paint must contain lead pigments. The other factor is that the actual presence of hydrogen sulfide in the atmosphere of industrial areas. Air pollution studies indicate that the hydrogen sulfide concentration in the atmosphere varies from zero to four-tenth parts per million in most areas to as high as forty parts per million in localized industrial areas. Particularly bad conditions exist in steel-making areas where the gas evolves from cokeovens.

Previous research studies of the effect of hydrogen sulfide on paint films were conducted by methods involving immersion in an H_2S solution, spot tests with an H_2S solution, or exposure to the gas under a bell jar where the concentration was much greater than would be encountered in any actual atmosphere.

Atmosphere Simulated

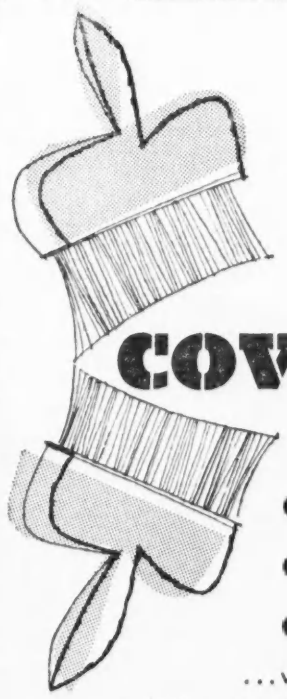
Accordingly, for the purposes of this study a cabinet was constructed of three-quarter inch plywood. The cabinet was made air-tight and had a volume of approximately 3,600,000 cubic centimeters. The cabinet was lined with aluminum foil and all edges sealed. At the top of the chamber, large glass ports were installed through which the panels under test could be observed. Thermometers, wet and dry bulbs, a circulating fan and humidity controls were installed. Correctly measured hydrogen sulfide gas was injected into the chamber and the concentration of gas for any given set of conditions was closely controlled.

Various types and formulations of paints were tested for discoloration under varying controlled atmospheric conditions.

Conclusions

From this work the following conclusions were drawn:

1. With H_2S present in the atmosphere no blackening occurs unless the paint contains lead pigments.
2. The type of white lead pigment in the paint is immaterial. The degree of blackening varies directly with the amount of lead metal represented.
3. Practically no blackening occurs unless the paint film is actually wet with water, regardless of the humidity of the atmosphere.
4. The amount of hydrogen sulfide in the atmosphere appears not to be critical. Small concentrations of H_2S will produce blackening under optimum conditions at slower rates than high concentrations.
5. Hydrogen sulfide blackening is very considerably delayed if the paint film is glossy and unweathered. High pigment volume concentration systems therefore darken more readily since less protective vehicle is present.
6. Normal amounts of lead naphthenate drier in lead pigment free paints will not produce blackening to any noticeable degree.
7. An alkyd resin paint included in the series appeared to be more susceptible to darkening than linseed oil paint.



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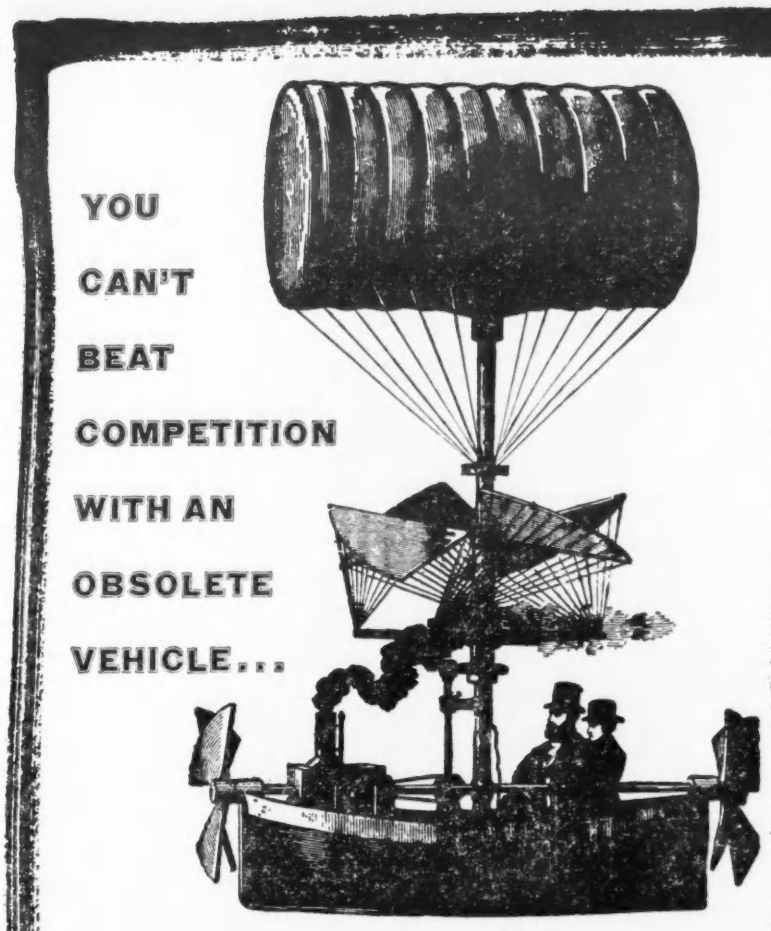

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Instrument Described

The instrument consists of an oblong cabinet measuring approximately 8 inches by 8 inches by 30 inches with a plexiglass front door. A sensitive calibrated steel spring supporting a filter paper disc and a wire paper support is suspended from the ceiling of the cabinet. A millimeter scale and mirror are situated directly behind the spring to allow readings to be taken of the relative position of a filter paper disc during the course of the evaporation of a solvent sample from the paper. Compressed air, conditioned from 0-5 per cent humidity and 77 degrees F. is passed through the cabinet from top to bottom at a rate of twenty-one liters per minute. Accurate air flow is controlled by means of a rotameter in the incoming air line. The thin film evaporator is mounted within a larger cabinet which is maintained at 77 degrees F. by simple thermostatting. Thus the instrument may be located in any convenient spot in the laboratory.

It is therefore obvious that the thin film evaporator, as its name implies, measures the evaporation of a volatile solvent spread in a thin film, which is in principle similar to the conditions of surface areas and solvent volume encountered with an applied paint film.

The complete method of test, detailed procedures, controlled conditions, calculations, and data required are set forth in the paper.

Six cooperating laboratories ran repeated tests on toluene, xylene, VM&P naphtha, mineral spirits, cumene and odorless mineral spirits. The repeatability of results overall by this method was concluded to be on the order of 1 percent, in either direction.

Hydrogen Sulfide Blackening of Exterior White House Paints

Pittsburgh Club

The darkening or blackening of paint films in an atmosphere containing hydrogen sulfide is a well known reaction. The discoloration is the result of the formation of lead sulfide by the reaction of hydrogen sulfide present in the air, with lead-co

taining compounds (pigments or driers) in the paint. It is an interesting fact, however, that the mere presence of hydrogen sulfide in the air, and lead pigments in the paint, will not necessarily produce a discoloration sufficient to be objectionable. Accordingly, the purpose of this study is to observe the atmospheric conditions which promote blackening, as well as variables in paint formulation which will increase, diminish, or eliminate the effect of these conditions.

Why the Problem?

There are two primary factors which are behind the annual complaints received on this type of problem. One is the fact that there are still a lot of people who believe that good white house paint must contain lead pigments. The other factor is that the actual presence of hydrogen sulfide in the atmosphere of industrial areas. Air pollution studies indicate that the hydrogen sulfide concentration in the atmosphere varies from zero to four-tenth parts per million in most areas to as high as forty parts per million in localized industrial areas. Particularly bad conditions exist in steel-making areas where the gas evolves from cokeovens.

Previous research studies of the effect of hydrogen sulfide on paint films were conducted by methods involving immersion in an H_2S solution, spot tests with an H_2S solution, or exposure to the gas under a bell jar where the concentration was much greater than would be encountered in any actual atmosphere.

Atmosphere Simulated

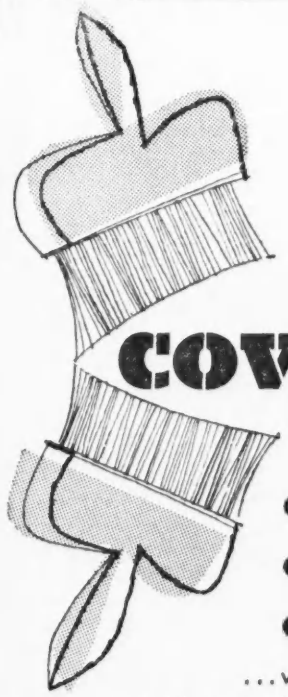
Accordingly, for the purposes of this study a cabinet was constructed of three-quarter inch plywood. The cabinet was made air-tight and had a volume of approximately 3,600,000 cubic centimeters. The cabinet was lined with aluminum foil and all edges sealed. At the top of the chamber, large glass ports were installed through which the panels under test could be observed. Thermometers, wet and dry bulbs, a circulating fan and humidity controls were installed. Correctly measured hydrogen sulfide gas was injected into the chamber and the concentration of gas for any given set of conditions was closely controlled.

Various types and formulations of paints were tested for discoloration under varying controlled atmospheric conditions.

Conclusions

From this work the following conclusions were drawn:

1. With H_2S present in the atmosphere no blackening occurs unless the paint contains lead pigments.
2. The type of white lead pigment in the paint is immaterial. The degree of blackening varies directly with the amount of lead metal represented.
3. Practically no blackening occurs unless the paint film is actually wet with water, regardless of the humidity of the atmosphere.
4. The amount of hydrogen sulfide in the atmosphere appears not to be critical. Small concentrations of H_2S will produce blackening under optimum conditions at slower rates than high concentrations.
5. Hydrogen sulfide blackening is very considerably delayed if the paint film is glossy and unweathered. High pigment volume concentration systems therefore darken more readily since less protective vehicle is present.
6. Normal amounts of lead naphthenate drier in lead pigment free paints will not produce blackening to any noticeable degree.
7. An alkyd resin paint included in the series appeared to be more susceptible to darkening than linseed oil paint.



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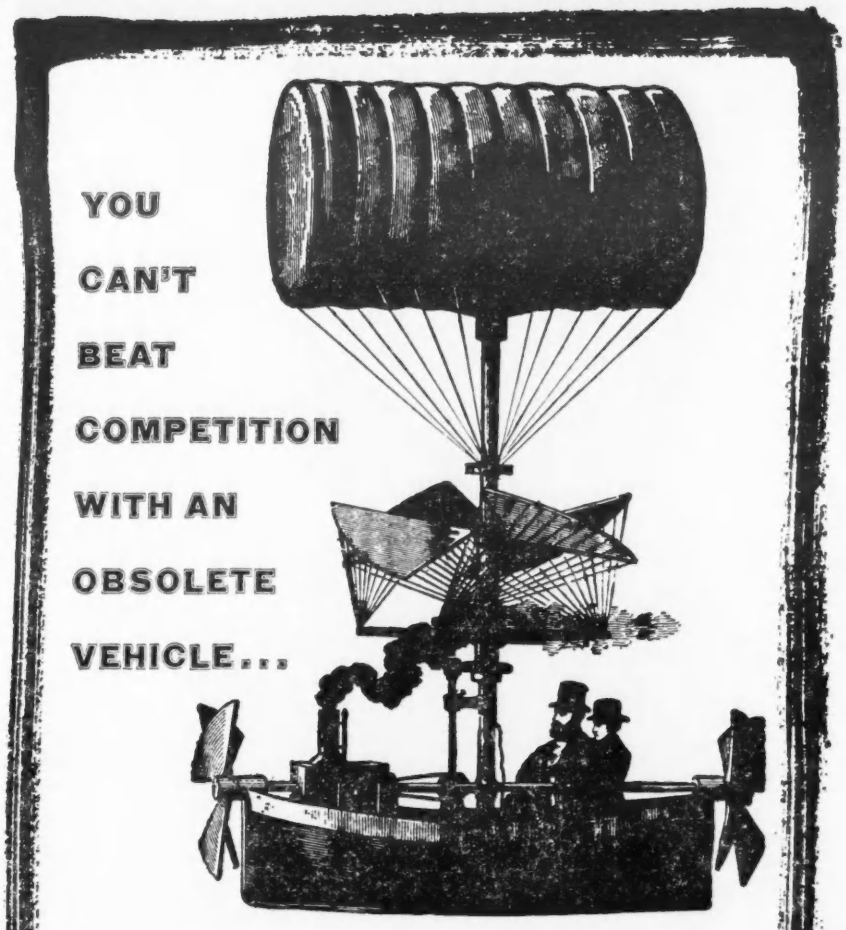

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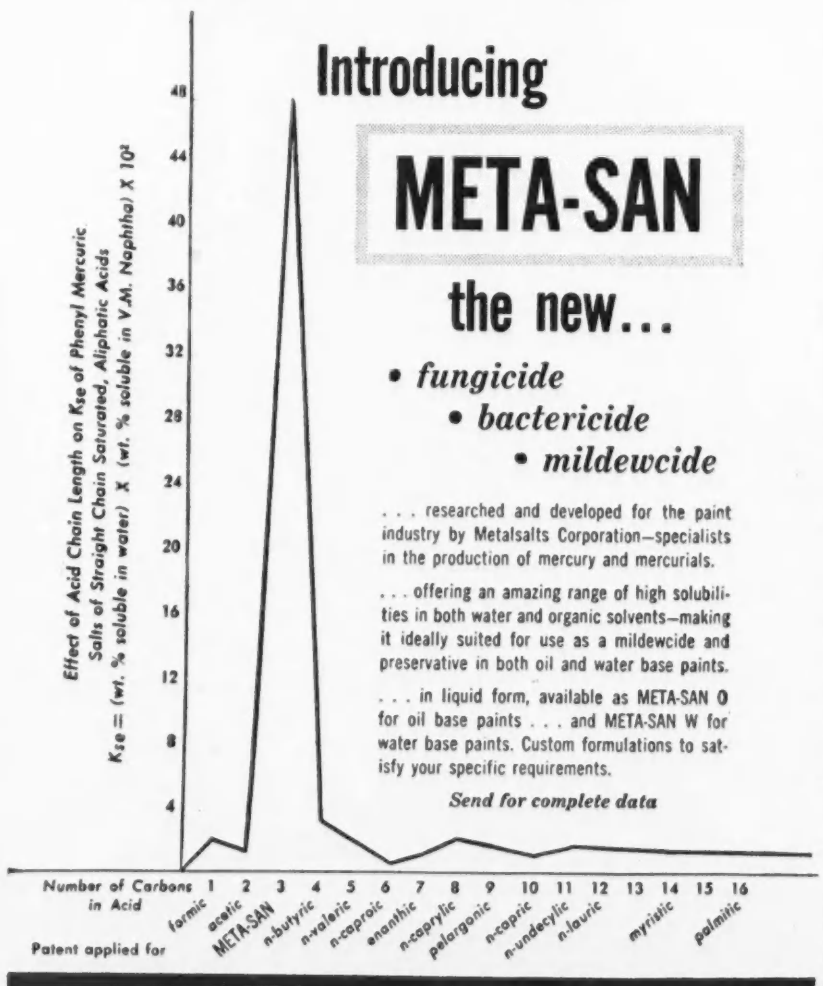

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Coatings Materials

Reports of an impending advance in chrome colors were confirmed last week when a major producer in the field announced that quotations would be moved up 1c. to 2c. per pound on December 1. Chemically pure green chrome is to be advanced 2c. per pound, and other grades 1c. per pound. Chrome yellow, molybdated chrome orange, and zinc chrome will each be increased 1½c. per pound. A second manufacturer has scheduled similar advances for December 10, while others in the field are studying the situation and are expected to make announcements shortly.

It was made known last week that a price advance in iron blues, probably to the extent of 2c. per pound, would be posted before the end of the year, but the effective date has not been decided yet. Only one manufacturer so far has said that the increase was definite, although in view of cost increases encountered in basic materials, the advance is apt to be universal.

Renewed strength was noted in the London metals market last week as it became known that the Suez Canal would be out of operation for at least six months. While this development has not altered quotations in the American market, it has injected considerable strength, particularly in the effect it has had on sales. Consumers were rushing to buy lead and zinc pigments in order to build up inventories against the possibility of a price advance.

So far the Suez crisis has not been a very important force in the gum market, probably because dealers' inventories are still ample. But in time the longer trip around the Cape will mean increased rates for freight and insurance, and this will be felt in replacement costs. As during the previous week, shellac demand was sluggish, reflecting seasonal production declines in consuming industries, coupled with the need for buyers to keep inventories low as the end of the year approaches.

The casein market in the Argentine was slightly easier last week, bringing New York quotations down ½c. per pound to 23½c.-24c. per pound, duty paid, December shipment. An assessment of the current situation has led observers to predict a stable market for casein in the near future. In the opinion of these observers, downward and upward pressures appear evenly balanced.

PriceTrends

Advanced
None.
Reduced
Casein, imp., Arg., ½c. per lb.
Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
100.30	100.30*	100.14	97.46

For Current Prices see Page 9
* Revised.

Prime Pigments

Aluminum Paste, Powder—This material has been moving evenly against seasonally good demand. Quotations, unchanged in recent months, are 68c. per pound for extra fine paste and 48c. per pound for standard. Powder is $1.09c. per pound for extra fine and 78½c. per pound for standard.

Antimony Oxide—The market was quiet and stable with prices holding firm at 27c. per pound for carlots, and 28½c. per pound for less than carlots. Supplies are plentiful.

Cadmium Colors—Both varieties of lithopone continued to meet good buying interest last week. Selenides were tight on spot orders, but were moving promptly on forward shipments. All prices were steady.

Green Chrome—Rising costs have induced one manufacturer to raise prices 1c. per pound, effective December 1. A second manufacturer will follow with similar revisions on December 10. Others were reported studying the situation and are expected to make an announcement shortly. Chemically pure green chrome will be advanced 2c. per pound, while other varieties will be increased 1c. per pound. As announced previously, chromium oxide was advanced to 44¾c. per pound in carlots and 45½c. per pound in less than carlots, effective November 12.

Iron Blues—A price increase in these materials will be posted before the end of the year, but the effective date and the amount of the increase have not been announced as yet. Informed opinion has it that one maker will soon post a 2c. per pound advance. Several leading producers were said to be still reviewing the matter without having determined yet what their policy would be.

Lead Pigments—Word of continued firmness abroad in the basic metal has strengthened the oxide market substantially. Buying interest was said to have picked up vigorously early last week, when prices began to look firm. As yet though, the domestic quotation has not followed the price in London.

Lakes and Toners—As announced previously, madder lake concentrate will be advanced 35c. per pound to $3.10 per pound, effective November 19. Cost increases reported throughout the year have contributed a firm undertone to lake and toners in general. Announcement of price advances in at least a few of these materials is expected to be made before the end of the year.

Orange Chrome—The price of this pigment will be moved up 1½c. per pound, to 35c. per pound on December 1 and December 10 by two leading suppliers. Similar increases are anticipated from other makers.

Titanium Dioxide—Fairly ample supplies of this material are available, though it could conceivably become tight again it a sizable increase in demand were to develop. As several producers have expanded facilities for the production of the pigment, an acute shortage, similar to the one existing a year ago, appears very unlikely. Quotations have held steady since the first quarter.

Yellow Chrome—Along with orange chrome, this pigment will be advanced 1½c. per pound on December 1 and December 10, reflecting increased costs of basic materials. Although as yet word has been received from only two producers, the price increase is likely to become general.

Zinc Chrome—The price listing of zinc chrome is scheduled for 1½c. advance, effective December 1 and December 10.

Zinc Oxides—The London market for zinc metal has responded with renewed firmness to the tieup at the Suez Canal. While this development has not changed quotations in the American market, it has injected considerable strength, particularly in the positive effect it has had on sales. Consumers who had been restricting their buying to short term needs bought extra material as the price firmed. Supplies were adequate to take care of the increased business.

Lacquer Materials

Dioctyl Adipate—Quotations were firmly maintained at 42½c. per pound for carlots, 43½c. per pound for less than carlots, and 40c. per pound for tanks. The market remained strong under the impact of brisk demand from the automobile, interior coatings, and rubber industries. The pace of business in these outlets was lively enough to offset the seasonal decline in exterior coatings. Market sources expect to see the current sales level sustained through the balance of November, followed by a decline in the first weeks of December. Supplies are plentiful and should remain so.

Phthalates—Since October 1 nothing new has developed in this market. At the start of the fourth quarter dioctyl phthalate was reduced 2c. per pound, while diethyl and dimethyl were advanced ½c. The new quotations have been firmly held in the intervening weeks. With business coming in at a good fourth quarter rate, prices have resisted slight downward pressure exerted by the presence in the market of off-grade, lower cost material.

Natural Resins

Gum—Trading in this material has been featureless. Demand has been restricted in recent weeks to prompt requirements

Coatings Materials

and has seldom exceeded a routine level. It is generally believed that the closing of the Suez Canal will bring about an increase in freight and insurance rates but this news has not had a firming effect on the market yet. The fact that dealers' supplies are still ample would account for the lack of interest in these developments. All quotations were held steady last week, with the most active copals and dammars listed as follows:—Manila C, copal, 36½ to 40c. per pound; DBB, 26¾c. to 29c. per pound; MA, 18½c. to 21c. per pound; dammar, Singapore No. 1, 44½c. to 46c. per pound, and No. 2, 31½c. to 33c. per pound.

Shellac—Price quotations were firmly maintained at the lower levels established several weeks ago. The market tone was still quiet and showed no tendency to liven up. This sales decline is attributed to seasonal slowdowns in consuming industries, coupled with the fact that at this time of the year buyers try to keep inventories low. As it is now certain that the Suez Canal will be closed for at least six months, replacement costs will undoubtedly firm, in view of higher freight and insurance rates. This may not be felt for a while though, because dealers' inventories are still ample. Unchanged quotations of orange grades are 48c. per pound for lemon No. 1, 45c. per pound for No. 2 and 43c. per pound for superfine.

Synthetic Resins

Alkyds—These resins were unchanged in a price listing dated November 7. Thus the outlook for the balance of the year is steady. Buying interest continues seasonally brisk, automobiles and industrial finishes being the most active outlets.

Ester Gum Solutions—Quotations were advanced ¼c. per pound by one maker, effective November 7 on spot, and January 1 on contract. The advance is a result of increased costs of crude gum and containers. Business volume is good, with supplies in balance.

Maleics—Advances ranging ¼-½c. per pound were posted on November 7 to spot buyers. Several grades of the resin were left unchanged.

Miscellaneous

Casein—The market in the Argentine was slightly easier last week. As a result, prices in New York (duty paid, December shipment) ranged ½c. lower at 23½c. to 24c. per pound. Demand here is still good, though not as brisk as a week ago. No material is available from Europe or Australia and offerings from New Zealand are light. Prospects for the immediate future would indicate a fairly stable market, as downward and upward pressures appear about evenly balanced.

Dried Blood, Soluble—Reports from Chicago indicate that production is well geared to the current level of buying interest. Quotations are 12c. to 13c. per pound for 60,000 pound carloads (depending upon grade) and from 13c. to 14c. per pound for 40,000 pound carloads. Truckloads range 14c. to 15c. per pound, while

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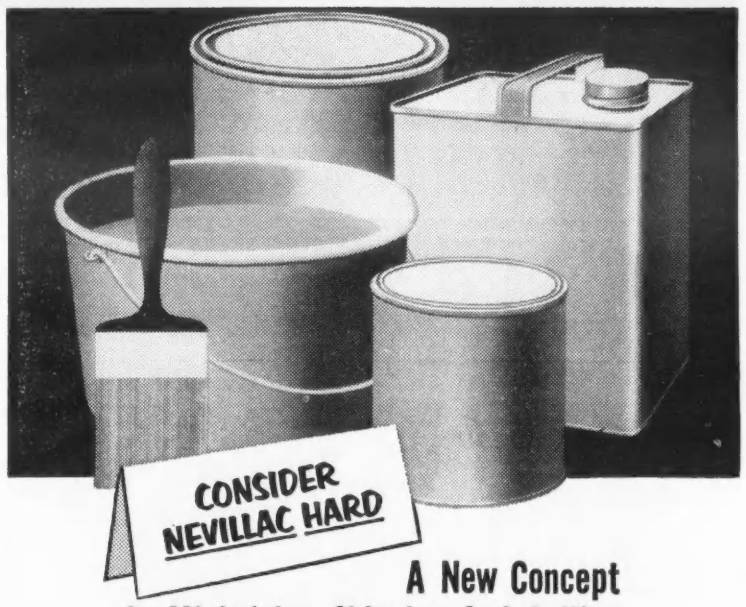

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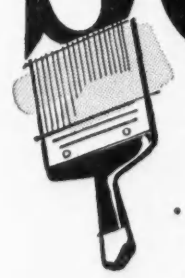

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Drums—					
K	...	...	$8.20	...	$8.18
M	...	...	8.19§	...	...
N	...	...	8.24§	...	...
WG	$8.53	...	8.43§	...	8.62
WW	...	...	8.73§	...	8.79§
Bags—					
K	...	...	8.10	...	...
M	...	...	8.14	...	...
N	...	...	8.20	8.20	...
WG	...	...	8.30	...	...

Tankcars (for week ended November 9)—
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Sales, USDA
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New York
(per 100 lbs., c.l., Friday)

Turpentine, Gum
(USDA, per gal., 7.2 lbs.)

Price	...	...	...	...	.56
Sales	...	...	...	...	4.000¶

New York, Friday, per gal. 7 lbs., tankcars

* Drums equivalent. ¶ Gallons. § Average price.
‡ Market closed for holiday.

Obituaries

Gene B. Landes

Gene B. Landes, a former vice-president of Carbide and Carbon Chemicals Company, a division of Union Carbide and Carbon Corporation, New York, died November 8 in New Rochelle, N. Y. He was sixty-nine years old.

Mr. Landes was one of the original group of experts with Union Carbide and Carbon when the company was formed in 1917. Originally with People's Gas, Light and Coke Company, a key unit in the former Samuel Insull utilities empire, Mr. Landes went with Union Carbide when that company was formed out of People's Gas.

Mr. Landes was appointed works manager for the company in 1929 and became vice-president in 1944. He retired in 1954.

Robert W. Lea

Robert W. Lea, recently retired director of Olin Industries, Inc., died November 13 in New York. He was seventy years old. In 1939 Colonel Lea joined Johns-Manville as vice-president and was elected a director in 1940. In 1946 he became president of the company, and retired in 1951 at the age of sixty-five.

Later that year he became a member of the executive committee of Olin Industries. Though he retired this January from this post, he continued to serve as a consultant to the executive staff of Olin Mathieson Chemical Corporation, New York.

Harry F. Sinclair

Harry F. Sinclair, founder of the Sinclair Oil Corp., died November 10 in Pasadena, Calif. He was eighty years old.

Mr. Sinclair, who was also chairman of the board of Richfield Oil Corporation, retired from active management in 1949 and five years later gave up his membership on the board of Sinclair.

He began his career as an oil prospector in the oil fields of Kansas and Oklahoma and had amassed a vast fortune by the time he was thirty-five. In 1916, he founded Sinclair Oil. Richfield Oil was founded in 1937.

Mr. Sinclair's name figured prominently in the Teapot Dome oil scandals of the 1920's. The case involved the lease of the naval oil reserve at Teapot Dome, Wyo., to Mr. Sinclair's Mammoth Oil Company. The lease was made in 1922 and invalidated in 1927 by the Supreme Court.

William E. Coe, retired chemical engineer and cement tester for New York City, died November 12 in Allentown, Pa. He was seventy-six years old.

Reginald Harrison Eagles, vice-president of industrial products department, J. M. Huber Corporation, New York, died November 14 in Akron, Ohio. He was sixty-one years old. Mr. Eagles joined the company in 1923.

Paul Graus, manager of Indonesian exploration for Caltex Pacific Petroleum Company, died November 11 in Washington, D. C. He was fifty years old. Mr. Kraus had formerly been a geologist with Standard Oil Company of California.

James H. Hurlt, 3d, president of Mynol Chemical Company, Philadelphia, died November 8 in that city. He was fifty-seven years old. He became president of Mynol in 1946.

Maurice A. Knight, pioneer in the manufacture of chemical stoneware, died November 10 in Akron, Ohio. He was seventy-two years old. Mr. Knight founded the firm of Maurice A. Knight Company, Akron.

J. Kenneth W. Macalpine, associate professor of chemistry at New York University, died November 8 in New York. He was fifty-eight years old. Mr. Macalpine joined the NYU faculty in 1924 and became an associate professor in 1930.

Robert F. Maturin, an assistant advertising manager of American Smelting & Refining Company, New York, died November 5 in Morristown, Pa. He was twenty-eight years old.

Arthur T. Roberts, retired treasurer, director and controller of Socony Mobil Oil Company, New York, died November 14 in that city. He joined the company in 1907.

William B. Wingert, vice-president of the Semet-Solvay Division of Allied Chemical & Dye Corporation, New York, died November 14 in White Plains, N. Y. He was fifty-five years old.

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Petroleum Derivatives

Brisk demand for solvents and liquefied petroleum gases continued to highlight this market last week. Producers reported that xylol and benzol were in particularly good demand because of the seasonal upswing in automobile manufacture. Cokeoven supplies of xylol have been a bit tight and as a result petroleum producers have increased production accordingly. The market as a whole has thus been kept in good balance.

In the opinion of LPG manufacturers, supplies will be ample to take care of the heavy demand anticipated during the coming winter. But because of a shortage of tankcars, resulting from the recent steel strike, transportation problems might develop, causing occasional delays in shipment. Producers hope to keep the materials moving rapidly enough by increasing the runs of individual tankcars.

Business volume in waxes last week held at a good seasonal level. An indication of the continued expansion taking place in this market was given by a producer who announced that during the first ten months of this year business ran ten to fifteen percent ahead of the corresponding period of 1955. Most of this advance has been scored in the direction of increased use in food packaging. On the Pacific Coast increased demand has just about eliminated the heavy inventories held by producers earlier in the year, bringing the market close to balance. Unchanged prices there are as follows:—121/131 ASTM, slabs, loose, fully refined, f.o.b. refinery, San Francisco, .0905c. per pound; 140/147 ASTM, same basis, .0825c. per pound; and 157/162 ASTM, same basis, .098c. per pound.

PriceTrends

Advanced
None.

Reduced
None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
105.71	105.71	105.71	104.32

For Current Prices see Page 9

Solvents and Diluents

Benzol—A high level of automobile production has contributed considerable strength to this market since the start of the fourth quarter. The material is in close balance for cokeoven producers, while in the petroleum field supplies are ample. Imports from Europe are still moving into this country in impressive quantities and are being absorbed promptly. But some observers feel that if, because of the Suez stoppage, crude oil supplies were to dwindle in Europe, the policy there might be to stockpile supplies of benzol.

Partial Aromatics—Buying interest was unchanged from the previous week. It appears to have levelled off to a moderately good fourth quarter pace, reflecting the general tone of the economy. The entire list of prices was held steady to firm.

Toluol—No changes were reported in this market last week. The supply picture in cokeoven quarters is still heavy, although a few producers report that their inventories have been in better shape since the steel strike. Although petroleum producers have encountered good demand from industrial sources, much of the material is being run into high octane gasoline.

Xylol—Increased demand for this solvent during the last month or so has been met to a large extent by petroleum producers in view of the pinch on supplies experienced by other makers. As the material is amply available from petroleum sources, the market as a whole continues to show good balance.

LPG'S

Butane—The market East of the Mississippi continues to show excellent strength. In the Los Angeles area, the seasonal sales increase has been delayed because the summer weather has lasted longer than usual.

In the opinion of the major manufacturers here, supplies will be ample to take care of the winter season, but some shortages could develop in connection with transportation difficulties. Because of the recent steel strike, there is a shortage of tankcars, and in order to keep the material moving rapidly enough, it will be necessary to increase the runs of individual tankcars. Sources in the industry believe the job can be done, although it will involve close scheduling and may occasionally cause a delay.

Propane—All storage facilities for this material have been filled, with a view to preventing a repetition of the regional shortages which were experienced during the last winter season. Producers are confident that, unless the winter is unusually severe, supplies will be found adequate. As in the case of butane, though, transportation is likely to become a problem and could cause temporary shortages.

The level of business encountered to date this season has shown the expected increase in consumption. Prices were recently advanced ½c. per pound, and since have been steady with a firm undertone.

Waxes

Microcrystalline—Sales by one producer during the first ten months of 1956 have shown a ten to fifteen percent increase over the volume of business during the comparable period of the preceding year. The increase in volume is attributed largely to expanding use as a material for food packaging. For some producers, expansion in the foreign market has been an important factor in building up sales.

The last reported increase was posted October 1. According to one producer, the industry should be able to hold the line at the new price level, as no important changes in materials costs are anticipated. Supply levels are in good balance with the rate of demand.

Paraffin—This market has shown about the same degree of expansion during the year as microcrystalline. In last week's trading, business on the West Coast showed further improvement. Quotations there were unchanged as follows:—121/131 ASTM, slabs, loose, fully refined, f.o.b. refinery, San Francisco, .0915c. per pound; 140/147 ASTM, same basis, .0825c. per pound; and 157/162 ASTM, same basis, .098c. per pound.

Miscellaneous

Current reports of the industry for the week ended November 2 indicate a decrease in crude-oil production and an increase in crude runs. According to the A.P.I., the daily average output of crude (including lease condensate) was 6,981,000 barrels, a decrease of 17,000 barrels from the preceding week. Daily average runs to stills of 7,853,000 barrels were 183,000 barrels above the preceding week, and 292,000 barrels above the week ended November 4, 1955. Runs of foreign crude amounted to 1,018,000 barrels daily, compared with 1,157,000 barrels in the preceding week. For the four-week period ending November 2, crude oil production averaged 6,992,000 barrels daily and crude runs to stills averaged 7,638,000 barrels daily, with runs of foreign crude averaging 1,019,000 barrels daily.

The amount of domestic crude petroleum to be consumed or exported in November, 1956, is estimated by the Bureau of Mines at 7,035,000 barrels daily, as compared with the 7,048,000 barrels daily forecast for October, 1956. This prediction includes estimates of total gasoline demand at 115.5 million barrels in November, a gasoline yield of 44.0 percent and total crude runs of 7,915,000 barrels daily.

Crude Oil Stocks

Stocks of domestic and foreign crude petroleum at the close of the week ended November 3 totaled 282,831,000 barrels, according to data reported to the Bureau of Mines. Compared with the total of 283,608,000 barrels for the preceding week, this represents a decrease of 777,000 barrels, comprising a decrease of 183,000 barrels in stocks of domestic crude and a decrease of 594,000 barrels in stocks of foreign crude.

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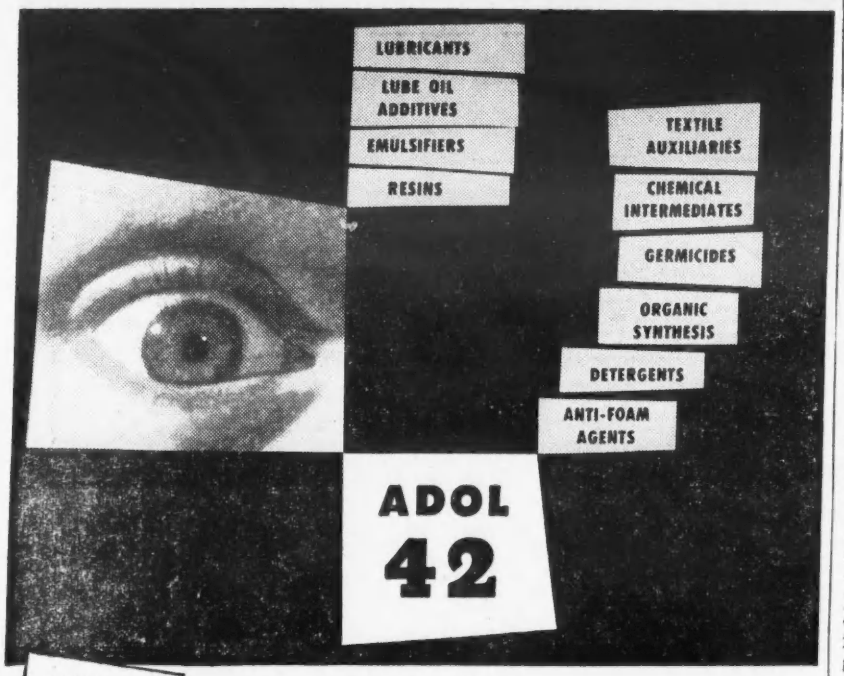

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Oils, Fats and Waxes

Trend of oils and fats last week was upward as a result of improved trading for export and domestic account. Soybean oil advanced sharply reflecting improved trading and higher cost of beans. Heavy buying of crude peanut oil for shipment to Europe boosted market 1½ cents per pound. Cottonseed oil remained strong and advanced fractionally. Corn oil also was higher. European interest in crude coconut oil stiffened the market at the close and early decline was erased. Strength of edible grades was reflected in rice bran and olive oils and prices were firmer.

Tallow and greases were in active demand for export especially the lower grades and quotations were fractionally higher. Domestic business was limited to actual needs. Italy purchased yellow grease heavily and Turkey was authorized to purchase 15,000 tons of tallow. Trading in lard was more active and market advanced sharply.

Owing to the higher cost of foreign castor oil for replacement due to heavy demand from Europe, domestic grades were boosted 1 cent to 1½ cents per pound. Brazilian oil also was lifted 1 cent per pound. This increased buying interest from domestic users for both grades. European buying at primary sources also was reflected in tung, oiticica and rapeseed oils and prices were lifted fractionally. Linseed oil also was stronger with further advances in flaxseed. New business in this oil continued slow, while consumers absorbed large quantities against former contracts. Refined fish oil remained steady and quotations were not shadable. Limited stocks of crude menhaden were firmly held at unchanged quotations despite slow export business.

Consuming demand for vegetable waxes continued restricted to actual needs. Crude beeswax commanded more interest but trading was affected by the scarcity of available supplies from primary sources. Prices were firm, but merely nominal. New crop carnauba was offered at official prices for December shipment, but buying interest lagged in the hope that the Brazilian government might reduce the official schedule.

PriceTrends

Advanced

Acid, linseed, 3 10c. per lb.
Cocoa butter, 2c. per lb.
Greases, ⅛c. to ¼c. per lb.
Lard, cash, 1½c. per lb.
Linseed meal, $1 per ton.
Oil, castor, dom., 1c. to 1½c. per lb.
No. 1, Braz., 1c. per lb.
Coconut, crude, ¼c. per lb.
Corn, crude, ¼c. per lb.
refd., ¼c. per lb.
Cottonseed, crude, ¼c. per lb.
refd., ¼c. per lb.
Linseed, 3 10c. per lb.
Olive, 5c. per gal.
Oiticica, ¼c. per lb.
Peanut, crude, 1½c. per lb.
refd., 1½c. per lb.
Rapeseed, ½c. per lb.
Rice bran, ½c. per lb.
Soybean, crude, ½c. per lb.
refd., ½c. per lb.
Tung, ½c. per lb.
Tallow, ⅛c. per lb.

Reduced

None.

Comparative Price Indexes
(100—1949 average)

Last week	Prev. week	Last month	Nov. 18, 1955
120.76	120.40	116.65	102.49

For Current Prices see Page 9

Vegetable Oils

Castor—Increased cost of imported oil and castor beans replacements stiffened this market. Domestic grades were lifted 1c. per pound, except dehydrated and hydrogenated which advanced 1½c. per pound. Brazilian oil also was stronger and raised 1c. to 20½c. per pound, tankcars, New York, prompt delivery.

Coconut—Crude was firmer and fractionally higher, due to active demand from Europe. Prompt shipment was lifted to 11¼c. per pound, tankcars, f.o.b. Pacific coast and 12¼c. to 12⅜c. New York basis.

Corn—Trading in crude took place at 14¼c. per pound, tankcars, f.o.b. mills, up ¼c. Refined also was higher at 17.83c. per pound, tankcars, New York, prompt.

Cottonseed—Trend of futures continued upwards last week, reflecting the strength of lard, and soybeans. Trading was active. Prices scored fractional advances, with July forward positions reaching new highs. New buying and short covering absorbed liberal hedging sales. Export interest was active especially in soybean oil. Consuming demand was limited as consumers refused to follow the market upward. Refined salad oil was stronger with crude and advanced to 17⅜c. per pound, tankcars, New York, prompt delivery.

Crude cottonseed oil was stronger and fractionally higher. Trading was moderate, with offerings also closely held. Sales were reported in the southeast at 14c. per pound, tankcars, f.o.b. mills, also 13¾c. in the Valley; 13⅞c., Lubbock, and 14c., Waco.

Cottonseed Oil Futures

Sales and prices of prime summer yellow cottonseed oil futures in tankcars (60,000 pounds) on the N. Y. Produce Exchange for the week ended Friday, November 16, follow:—

	Sales	High	Low	Close
		Cents per pound		
Dec.	331	16.05	15.71	15.88S
Jan.	7	16.05	15.80	15.87@15.95
Mar	623	16.35	16.04	16.15S
May	500	16.49	16.12	16.28S
July	126	16.49	16.12	16.25S
Sept.	25	16.27	16.05	16.09S
Oct.	2	15.98	15.97	16.00@16.10
Dec. (1937).	37	16.10	15.90	16.00S

Total sales and switches, 1,651 contracts.

Linseed—Higher cost of flaxseed was reflected in oil and quotations were lifted 3/10c. per pound. Raw oil were held at 13.7c. per pound, tankcars, Minneapolis, November-December delivery. New business was reported spotty, while active demand continued for delivery against former contracts.

Flaxseed—Market stronger, up 5c. per bushel. Seed offers still light.

Minneapolis.—Crushers advanced bids on cash flaxseed an additional 5c., making a total of 10c. in the past fortnight. Prices were at $3.45, spot and to-arrive, basis Minneapolis. The Commodity Credit Corporation reported that flaxseed under loan as of October 15, 1956, was over 50 percent higher than a year ago. Farmers still had not exercised loan privilege to any great extent, but they have until January 31 to act. Offerings of cash flaxseed did not increase on the advances, not surprising since producers usually sell ahead of a decline. Trade advices indicated that farmers might be holding off for income purposes until after January 1. No export interest in flaxseed was noted. Offerings in the spot cash market amounted to only 18 cars while to-arrive bookings totaled 95 cars and 40,100 bushels in trucklots. Arrivals of flaxseed for all accounts were 146 cars, compared with 172 cars a year ago. Shipments totaled 19 cars, against 34 a year ago.

Receipts and shipments of flaxseed, in bushels, were asfollows:

	Receipts 1956-57	Receipts 1955-56	Shipments 1956-57
Past week	264,400	301,000	34,200
Since Sept. 1	10,505,400	10,752,000	1,258,200

Oiticica—Improved tone featured this market and quotations were lifted fractionally. Tankcars were higher at 14½c. per pound, tankcars, New York, prompt delivery. Drums were firmer, ranging from 16c. to 16½c. per pound, spot, as to quantity.

Olive—New crop Tunisian oil was reported sold at $75 per 100 kilos, c. and f., New York, for early December shipment. Late December shipments were quoted $2 less. Latest estimates of new crop Spanish oil have reduced production to about 300,000 tons against earlier reports of 350,000 to 360,000 tons. This gave the spot market a steadier tone and drums were raised to $3.30 to $3.40 per gallon, drums, duty paid as to quantity and quality. It was reported that shipments of new crop Spanish oil were expected to be authorized by the government during the latter part of January.

Palm—Trading was confined to fill-in needs. Drums were unchanged at 15½c. to 16½c. per pound, spot as to quantity and 12¾c., tankcars, prompt delivery.

Peanut—Heavy buying of crude for shipment to Europe cleared the market of offerings and sales were made up to 17c. per pound, tankcars, f.o.b. mills and the market closed nominal thereat. Refined oil also was firmer and lifted to 20¾c. per pound, tankcars, New York basis.

Rapeseed—This market was firmer and tankcars were lifted to 18½c. per pound, tankcars, New York, prompt and later delivery. Recent sales took place at ¼c. less.

Rice Bran—This market reflected the

Oils, Fats and Waxes

firmness of other vegetable oils and tankcars were raised to 15½c. per pound, New York, prompt delivery.

Soybean—Active trading, chiefly for export strengthened market and prices advanced sharply quotations sharply. Spain purchased about 20,000 tons of refined soybean in drums for prompt shipment.

Soybean Oil Futures

Sales and prices of crude soybean oil futures (new contract) in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, November 16, follow:—

	Sales	High	Low	Close
		—Cents per pound—		
Dec.	11	13.38	13.21	13.40@13.55
Mar.	10	13.10	12.79	13.02@13.10
May	27	13.10	12.80	12.86S
July	2	12.84	12.73	12.65@12.70

Total sales, 50 contracts.

Other export business was pending. Crude sold up to 13½c. per pound, tankcars, Decatur, November-December and 13¼c., January-February. Refined salad was higher at 16¼c. per pound, tankcars, New York, prompt delivery.

Tung—Firmer Argentine market as a result of active trading for European delivery was reflecting locally and quotations were lifted ½c. per pound. Trading was quite active ranging from 22½c. to 22⅞c. per pound, tankcars, New York basis with offers held at 23c. Drums also were higher at 23½c. to 25c. per pound, according to quantity.

Miscellaneous

Castor Beans—Offers for shipment were scarce and entirely nominal, around $170 with trading reported up to $180 per ton, f.o.b. Brazilian port.

Imports of castor beans and castor oil at New York and Philadelphia last week were as follows:—

	Pounds	
	Beans	Oil
Last week	2,850,000	1,396,000
Previous week	94,500	940,000
Corresponding week, 1955	1,531,800	2,280,000
Total this year	40,299,510	68,231,000
Corresponding period, 1955	74,757,110	41,869,000

Cocoa Butter—Market was firmer, with trading reported at 62c. to 65c. per pound, as to quantity.

Copra—This market remained steady due to improved trading for European account. Prompt shipments were quoted at $155 per ton, c.i.f. Pacific coast.

Fats and Greases

Greases—Active export trading especially in yellow grease for shipment to Italy raised quotations fractionally. Yellow was higher at 7c. per pound, tankcars, delivered and choice white all hog from 8⅜c. to 8½c., same basis, as to seller.

Lard—Market was sharply higher due to improved trading. Cash lard was lifted to 13.40c. per pound, drums, Chicago.

Oleo Oil—This market remained unchanged and steady. Extra was quoted at 19c. to 19½c. per pound, drums, according to quantity and seller. Oleo stearine was maintained at 14c. to 14½c. per pound, same basis.

Tallow—Improved export interest created a stronger tone and prices were higher especially for the lower grades. Turkey was authorized under PL 480 to purchase 15,000 tons of tallow. Moderate purchases were reported by soapers at unchanged quotations, while dealers paid higher prices. Bleachable fancy was quoted at

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Tallow Futures

Sales and prices of bleachable tallow futures in tankcars (60,000 pounds) on the New York Produce Exchange for the week ended Friday, November 16, follow:—

	Sales	High	Low	Close
		—— Cents per pound ——		
Dec.	2	8.01	8.00	8.08@8.10

Total sales, 2 contracts.

Cake and Meal

Cottonseed Meal—The cotton crop of 13,153,000 bales forecast by the government as of November 1 was down almost one percent from the previous month estimate. In the South Central and Eastern states about ninety percent of the crop has been harvested. Prices held steady and supplies seem to be moving about as fast as produced. Forty-one percent old process was offered at $57 per ton Memphis; $59 North Alabama; $60.50 Georgia-South Carolina and $61 North Carolina November/December shipment.

Linseed Meal—Good demand and light stocks for nearby delivery advanced market $1 per ton.

Minneapolis.—Strength persisted in linseed meal market, crushers advanced quotations $1 to $1.50 a ton. Supplies were not plentiful and good demand prevailed for both nearby and deferred shipment ahead of the advance. However, business tapered off at the higher level. Shipping directions continued at an active pace. Crushers quoted linseed meal, 36 percent protein extracted type, at $54 a ton for November December; $53.50 for January forward. Expeller meal, 32 percent protein, held at $61.50 for December; $60.50 for January March.

Shipments of linseed meal, in ponds, were as follows:

	1956-57	1955-56
Past week	18,660,000	19,620,000
Since Sept. 1	161,100,000	198,121,000

Soybean Meal—Production was heavy and demand moderate. Prices have shown slight signs of weakness although processors are hesitant about cutting prices in the face of firm soybean market. Forty-four percent was offered at $47.50 per ton November-December; $48 January-September basis Decatur, and $50 Valley points November-December.

Waxes

Scarcity of offerings of crude beeswax continued to affect trading. Prices were strong and merely nominal. African was nominal around 72c. per pound and Brazilian and Chilean, 75c. nominal for prompt delivery. Candelilla was scarce and firmly held at former quotations. Trading in carnauba grades was still spotty, and confined to actual needs. Offers of new crop for late November and December shipment from Brazil were maintained at official prices.

Jefferson Beginning

—Continued from page 5

material in manufacturing numerous other chemicals. This will also permit Jefferson's entry into new fields based upon ethylene.

• Double the plant's capacity for ethylene glycol, best known for its use in the production of non-volatile antifreezes.

• Increase by 50 percent the production of ethylene oxide used in the manufacture of detergents and as a starting material for synthetic fibers.

The program will include installation of a direct oxidation unit to produce ethylene oxide, Mr. Bryant stated. Jefferson also plans to continue operation of its existing chlorohydrination equipment and will produce ethylene oxide by both processes.

In addition, Jefferson will construct a plant to produce chlorine which will be used in the manufacture of ethylene oxide and ethylene dichloride. Much of the caustic soda resulting from the process will be marketed, while the hydrogen will be used by the company.

Expansion plans also call for stepped-up output of a number of other chemicals, including specialty amines such as morpholine, an emulsifier for rubless waxes and polishes as well as a versatile intermediate, and ethylene oxide specialties.

Facilities for production of these products embody processes developed by the company's Austin, Tex., research laboratories.

Mr. Bryant pointed out that the new facilities mark Jefferson's entry into the production of propylene oxide, propylene glycol and other propylene derivatives.

Construction of dock facilities on the Neches River is already underway in anticipation of the forthcoming expansion. Separate storage facilities are being installed adjacent to the new docks.

National Tungsten Gets

—Continued from page 5

Tungsten a 50 percent interest in the property, as well as exclusive operating and management rights, was announced jointly by National Tungsten and Kolombo International Corporation, Los Angeles.

A Chilean subsidiary company, owned jointly by the two American firms, will be set up to own and operate the property.

Terms of the operating contract call for an initial production minimum by National Tungsten of 2,500 tons of ore per day. Site selection work is already underway by the firm's engineers. Shipment of mills, machinery, and equipment from the United States is expected to begin in about four months.

National Tungsten also announced that capacity of Tyler Mill, near Portervilie, Calif., will be doubled by the installation of new equipment.

A rod mill and other equipment being installed will increase capacity to more than 100 tons a day. The $25,000 installation is expected to be completed by Dec. 1.

DCAT to Hear Speech By Former HEW Head

Bradshaw Mintener, former assistant secretary of the United States Department of Health, Education & Welfare, will be the guest speaker at the fall luncheon meeting of the Drug, Chemical and Allied Trades Section of the New York Board of Trade.

The meeting will be held Thursday, November 29th, at the Waldorf Astoria hotel, New York.

Wholesale Drug

—Continued from page 7

which he said would go a long way to speed up sales among the six to eight thousand items carried, of which some are slow movers.

The program emphasizes "up front" store displays and product tie-ins.

On the subject of fair-trade, Mr. Allen said "the present status of manufacturer-wholesaler fair trade contracts and the need for stabilization of the distribution system should cause direct selling manufacturers to make a comprehensive study to determine whether it would be to their best interest to shift to a wholesaler-only policy."

He said that one firm which in recent years discontinued its dual sales policy "expects to do $28.5 million sales this year—$2.5 million above last year" and that the firm's president attributed these increased sales to a new policy of wholesale-only distribution and concentration on relatively few products.

Glass Containers

—Continued from page 7

evident in the shipments of glass containers to the food industry, soluble coffee and baby food packaged in glass serving as examples."

A pattern of glass container shipments similar to that observed in the food industry has been evident in shipments of medicinal and health bottles, Mr. Merrifield said.

"There are several elements of strength in this market for glass containers, particularly in the development of new antibiotics. In particular, whenever the actual medicine or drug comes into direct contact with the container, glass is usually the most efficient container," he stated.

Pointing out that areas of strength in the use of glass for packaging toiletries and cosmetics were particularly evident in the perfume and lotion fields, Mr. Merrifield predicted that shipments of glass containers for the toiletry and cosmetic industry are apt to rise about 5 percent above the estimated 1956 level in 1957.

Ferrocerium Tariff Plea

—Continued from page 4

stantially towards causing or threatening serious injury' to the domestic industry."

He said that "such difficulties as US industry has encountered appear to be due rather to an approximately 40 percent decline in US consumption of lighter flints, from 138,000 pounds in 1951 to 83,400 pounds in 1954, and to a sharp decline of about 90 percent in U. S. exports, from 86,100 pounds in 1951 to 8,000 pounds in 1954."

He added that "imports on the other hand in 1954 were only slightly more than 5,000 pounds and represented only 6.8 percent of the domestic consumption of lighter flints. Imports have increased since the commission filed its report but they still represent a relatively small proportion of domestic consumption."

Boggs Subcommittee

—Continued from page 4

dom, Belgium, Holland, Denmark and Germany.

This is the first time that a ways and means subcommittee, which has the legislative responsibility for all customs, tariffs and trade agreements legislation, has ever undertaken to make an "on-the-spot" overseas study of the effect of these programs and the manner in which they are being administered.

The two groups will return to the United States in mid-December to begin work immediately on a report to congress.

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3—Devine double door Vacuum Shelf 17 and 20—59"x78" shelves.
3—Stokes Rotary Vac 4'x20', 30"x8', 18"x42".
1—Devine Rotating Vacuum 5'x10'.
2—Louisville Rotary Steam Tube 38"x25', 6'x40'.
3—Rotary Dryers 4½'x50', 6'x40', 6'x60'.

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2—Baker Perkins 100 and 50 gal., 316 S.S.. Sigma Blades.
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5—Day "Cincinnatus" double arm 250 and 100 gals.
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1—Struthers-Wells 6'x9', 304 S.S. Rotating, jacketed.
1—Robinson 48"x7'6" long, 304 S.S. jacketed Powder, 90 cu. ft.
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1—Patterson NEW 6'x8' Porcelain lined Mill 50 HP motor.
3—Abbe Paterson 6'x8' unlined Ball Mills.
3—Abbe 5'x6', 4'x5', 3'x3½' Silex lined Pebble Mills.
3—Mikro Pulverizer Bantam and #2TH.
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1—Link Belt Roto Louvre Dryer, Model #502-20.

1—Link Belt Roto Louvre Dryer, Model 1106-36.

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For Sale: One 10 ton Carver Laboratory Press—thoroughly reconditioned and guaranteed. OPD 187.

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For Sale: 93 sq. ft. S.S. T304 Heat Exchanger ASME; 110 gal. Robinson S.S. unique semi-mass mixer jacketed ASME; 75 gal. S.S. jacketed Day double sigma blade Mixers; 700 gal. S.S. T304 sanitary Tanks; 24" x 36", 42" x 90", 42" x 100", double drum Dryers; S.S. T304 sanitary double effect Evaporator, 1025 sq. ft. Best Equipment Company, 617 Davis Street, Evanston, Illinois. DAvis 8-0926.

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REPRESENTATION OFFERED

Sales & Distribution wanted nationally for descaling, corrosion prevention boiler & refrigeration items selling to maintenance industrially. OPD 195.

NPVLA Convention Report

Text of Mr. Battley's Address

—Continued from page 61

newly formulated paints to keep weathered asbestos shingles and metal sidings looking clean, fresh and new. Homeowners should be able to go to their paint dealers and contractors for information on these new paints which will cover the dirty, grey shingles and hide the pits in the metal siding. I then reminded them that it is costly to replace those torn or snagged "Super-Dupper-New-Like-Plastic-Textile-Wall-Coverings." These coverings can't be patched and present the constant threat of expensive replacements.

New 'Paint Power' Planned

In this connection I shall present to the association's appropriate committees a new and improved "Paint Power"—together with a new sales training course program and an entirely new manual for the industrial product finishes manufacturers shortly after the first quarter of 1957.

* * *

Navy paint manufacturing has reached its final phasing-out plan and I think they have done so without political opposition. You will remember section 638 in the 1956 defense appropriations act gave the senate and house appropriations committees veto rights on proposed closing of Defense department activities that compete with private enterprise. But this year's report of the senate appropriations committee stipulated that the Defense department must continue such operations unless the purchasing price was lower than the cost when made in government plants.

The Bureau of the Budget's director recommended that the President establish the policy that "the apparent cost of a particular product or service will not be the deciding factor where adequate competition exists" as "the decision whether to continue or discontinue a government activity solely on an apparent cost basis runs counter to our concept that the government has ordinarily no right to compete in a private enterprise economy."

* * *

We are thoroughly investigating the claims made for the merits of competing surface covering materials. Then as we determine positively the advantages of paint and chemical coatings over any of these items, we will inform you and through our news media services, the buying public. With our factual and indisputable technical information, we shall be better able to stress the manifold advantages of our quality products.

Other scientific studies in 1957 include: (1) A study of methods for painting acoustic tile—in cooperation with the public building service of the General Services Administration and the American Society for Testing Materials; (2) study of the variables affecting the adhesion of paint films; (3) the data for methods of painting various types of hardboard is now being analyzed and prepared for publication; (4) we expect to find a way to determine when the moisture content of fresh plaster and concrete is such as to assure a good and lasting paint job.

* * *

Consider again the subject of competitive surface coverings that have taken some of our markets. *Architectural Forum* pointed out that in 1976, less than twenty years from now—there would be "56 million more people in America with 50 million more cars" and there will have to be at least ten million more housing units for these people—and millions of pieces of furniture and household appliances. We can plan now to move faster into areas where this growth must come. There are many more statistical factors involved in the progress of an industry—especially in our industry where we are faced with competition from inferior substitutes for our quality paints and chemical coatings products.

Differences Should Be Stressed

There certainly are differences between our products and those claimed by manufacturers of competing materials, just as there are differences in our paints. Whether or not the differences between latex, vinyls or alkyds, or the differences between linseed oil and tung oil, makes some paints superior to others has never been proven conclusively, nor accepted generally. Still we continue to advertise and state positively that one or the other, or a combination of two or more, makes this or that paint superior to all other paints.

But we haven't said as yet why our products are so much better and so superior and much more economical than any other type of surface covering. We must do so and do it aggressively if we expect to get our share of that 1976 potential market. I think we will do an effective job in this respect because of the inherent initiative in the manufacturers we have in this industry.

We have just reasons to be proud of their progress, but at the same time we should not permit any partial achievement to mask our eyes to the additional prospects that await us in the future. That is the 1957 challenge to our ingenuity and responsibility.

* * *

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Advertisers Index

Acme Refining Corporation 46
Alan Wood Steel Company 51
Allied Asphalt & Mineral Corp 65
American Agricultural Chemical Co., The ... 1
American Zinc Sales Co 62
Anderson-Prichard Oil Corp 71
Archer-Daniels-Midland Company 72
Argueso, M., & Co., Inc 73
Aromatic Products, Inc 64
Asahi Glass Co., Ltd 79

Baker, J. T., Chemical Co 8
Barclay Chemical Company, Inc 78
Barrett Division, Allied Chemical & Dye Corporation 50
Beacon Chemical Industries, Inc 70
Benzol Products Company 53
Berkshire Chemicals, Inc 38
Better Finishes & Coatings, Inc 39
Bios Laboratories, Inc 55
Bower, Henry, Chemical Mfg. Co 38
Bowman, Charles, & Co 56
Brill Equipment Company 75
Brode Corporation, The 73

Carbide & Carbon Chemical Company, Division Union Carbide & Carbon Corporation 46
Celanese Corporation of America, Chemical Division 80
Chemical & Process Machinery Corp 77
Chemical Service Corp 78
Chemical Solvents, C. P., Incorporated 80
Chemsol, Inc 78
Church & Dwight Co., Inc 36
Ciba Company, Inc 52
Coal Chemical Sales Div., United States Steel Corp. Subsidiaries 16, 17
Columbia Southern Chemical Corporation .. 36
Columbian Carbon Company 64
Commercial Solvents Corporation 23
Connelly, Inc 52
Consolidated Chemical Industries, Inc 43
Consolidated Products Company, Inc 76
Consulting Chemists and Engineers 74
Continental Oil Company 32
Corn Products Refining Company 57
Coupe, Robert A 42
Crossett Chemical Company Division of The Crossett Company 47

Darling & Co 73
Davison Chemical Company 30
Diamond Alakli Company 1
Distillation Products Industries, Div. of Eastman Kodak Company 46
Dow Chemical Company, The 51
Duff Chemical Company, Inc 43
Dunkel, Paul A., & Company, Inc 54
Du Pont de Nemours, E. I., & Co., (Inc.) ... 42

Eastman Chemical Products, Inc 68
Emery Industries, Inc 73, 78
Enjay Company, Inc 61
Equipment Clearing House, Inc 76
Esso Standard Oil Company 26

Esso Standard Oil Company 25
Fairmount Chemical Co., Inc 42
Felton Chemical Company, Inc 59
Fezandie & Sperrle 44
Fine Organics, Inc 80
First Machinery Corp 75, 76, 77
Florasynth Laboratories, Inc 58, 67
Fritzsche Brothers, Inc 58

Gane's Chemical Works, Inc 53
Gas Purifying Materials Co., Inc 42
Gelb, R., & Sons, Inc 77
General Chemical Division, Allied Chemical & Dye Corporation 28
General Equipment & Trading Co 70
Gillespie-Rogers-Pyatt Co., Inc 66
Glycerine Producers Association 19
Greeff, R. W., & Co 49
Gregory, Walter C., Corporation 57
Gross, A., & Company 72

Hall, C. P., Co., The 42
Hansborg & Company 48
Harchem Division, Wallace & Tiernan, Inc .. 47
Harshaw Chemical Co., The 33
Heat & Power Co., Inc 75, 77
Hercules Powder Company, Incorporated ... 45
Heyden Chemical Corporation 48
Hoffmann-La Roche, Inc 2
Hooker Electrochemical Company 43
Horn, Jefferys & Co 70
Hutchinson, D. W., & Co., Inc 58

Indoil Chemical Company 47
Industrial By-Products & Surplus Co 78
International Hormones, Inc 56
International Minerals & Chemical Corporation 27

Jefferson Chemical Company, Inc 18

Klinker Mfg. Co 78
Koppers Company, Inc 52

Lawler Company 75
Lemke, B. L., Co., Inc 54
Leonhard, Theodor, Wax Co., Inc 73
Lever Brothers Company 48
Loeb, H., & Son 77
Loeb Equipment Supply Co 76
Lucidol Division, Wallace & Tiernan, Incorporated 46
Lueders, George, & Co., Incorporated 58

Machinery & Equipment Corp 76
Magnus, Mabee & Reynard, Inc 58
Mantrose Corporation, The 65
Marshall Railway Equipment Corporation .. 78
Mathieson Chemicals, Olin Mathieson Chemical Corporation 15, 47
McKesson & Robbins, Incorporated 45
Merck & Co., Inc 54
Metalsalts Corporation 68
Michigan Chemical Corporation 55
Midland Tar Distillers, Inc., The 52
Monsanto Chemical Company 38
Moore & Munger 28a
Mutual Chemical Division, Allied Chemical & Dye Corporation 44
National Aniline Division, Allied Chemical & Dye Corporation 35
National Casein 69
Neville Chemical Co 69
New Drug Institute 55
Nitrogen Division, Allied Chemical & Dye Corporation 38, 48

Ohio-Apex Division, Food Machinery and Chemical Corporation 70
Olin Mathieson Chemical Corporation Industrial Chemicals Division 15, 47
Orbis Products Corporation 59
Oronite Chemical Company 14

Parsons-Plymouth, Inc., M. W 70
Penick, S. B., & Company 12, 13
Pennsylvania Salt Manufacturing Co., Industrial Division 1
Penola Oil Company 63
Perry Equipment Corp 76
Pfaltz & Bauer, Inc 54
Pfizer, Chas., & Co., Inc 11
Philadelphia Quartz Company 42
Philipp Brothers Chemicals, Inc 80
Pitt-Consol Chemical Co 51
Potash Company of America 48
Prior Chemical Corporation 1
Process Plants Service, Inc 76
Procter & Gamble Co 46
Publicker Industries, Inc 1, 10
Purocaine, Inc 56

Quaker State Oil Refining Corp 70

Raney Catalyst Co 48
R-B-H Dispersions 66
Read, Chas. L., & Co., Inc 36
Reichhold Chemicals, Inc 25
Republic Steel Corporation 51
Richmond Mica Corp 68
Richter, Gedeon Pharmaceutical Products, Inc 55
River Plate Corporation, The 73
Robeco Chemicals, Inc 80
Robertet, P., Inc 59
Rohm & Haas Company 22

Sergeant, E. M., Pulp & Chemical Co., Inc .. 49
Shea Chemical Corporation 38
Shell Chemical Corporation 20
Foster D. Snell, Inc 79
Socony Mobil Oil Co., Inc 69
Solvay Process Div., Allied Chemical & Dye Corporation 29
Southwark Mfg. Co 38
Spencer Chemical Company 48
Stein Equipment Co 76
Strohmeyer & Arpe Co 73
Sumner Chemical Company, Inc 57
Sunkist Growers, Inc 24
Synthetic Products Company 68

Tennessee Corporation 39
Texas Gulf Sulphur Co., Inc 37
Thurston & Braidich 54
Titanium Pigment Corporation 31
Tragacanth Importing Corp 54
Truland Chemical & Engineering Co., Inc .. 78

Ungerer & Co 59
Union Carbide & Carbon Corporation, Carbide & Carbon Chemcials Company Division 46
Union Standard Equipment Co 76
United Box & Lumber Co 44
United Fuel Gas Company 70
U. S. Borax & Chemical Corporation Pacific Coast Borax Company Division 1
U. S. Cotton Oil Co., Inc ..... ??
United States Potash Company Division of U. S. Borax & Chemical Corp 49
U. S. Steel Corporation Subsidiaries, Coal Chemical Sales Div 16, 17
U. S. Steel Products Division, U. S. Steel Corporation 37
U. S. Testing Company, Inc 80

van Ameringen-Haebler, Inc 59
Van Gelder Fanto Corporation 55
Velsicol Chemical Corporation 67

Western Condensing Co 21
Westvaco Chlor-Alkali Division, Food Machinery & Chemical Corporation 6
Will & Baumer Candle Co., Inc 73
Witco Chemical Company 60
Wyandotte Chemicals Corporation 43

Zink & Triest Co 58
Zinsser & Company, Inc., Subsidiary of The Harshaw Chemical Co 44

Current Market Quotations

—Continued from page 33

Zinc-ammonium chloride, ogs., c.l., works	100 lbs.	10.25	—
bbls., c.l., works	100 lbs.	10.85	—
l.c.l., works	100 lbs.	11.35	—
Zinc-formaldehyde sulfoxylate, basic, dms., c.l	lb.	.25½	—
l.c.l.	lb.	.26	—
Zircon (G), gran., bgs., c.l., works.	lb.	.03½	—
5 tons to c.l., works	lb.	.03⅝	—
1 ton to 9,999-lb lots, works.	lb.	.04	—
smaller lots works	lb.	.06½	—
milled, bgs., c.l., works	lb.	.04⅛	—
5 tons to c.l., works	lb.	.04⅜	—
1 ton to 9,999-lb lots works.	lb	.04⅝	—
500-1,999-lb. lots, works	lb.	.07½	—
Zircon (G) in barrels, lc. higher.			
Zirconium acetate, 13% com., ZrO., c.l., 30,000 lbs minimum, works	lb	23	—
Hydride, cns., works	lb.	7.00	8.45
Nitrate, dms., ex whse	lb.	4.50	7.00
Oxide 92½-99%, white grd., bbls, or bgs. works	lb.	1.50	—
lump, electric-fused, bgs.,			
lump, electric-fused, bgs., c.l., works	lb.	.44	—
5-ton lots, works	lb.	.44½	—
1 ton to 9,999-lb. lots, lbs., works	lb	.45	—
CP, white, grd., bbls., or bgs., works	lb.	1.50	—
lump electric fused, bags, 500 to 1,999-lb. lots, works	lb.	.45½	—
smaller lots, works.	lb.	.48	—
milled, electric-fused, bgs., c.l., works	lb.	.59	—
5-ton lots, works	lb.	.59½	—
1 ton to 9,999-lb. lots, works	lb.	.60	—
500 to 1,999-lb. lots, works	lb.	.60½	—
smaller lots. works.	lb.	.63	—
Oxychloride, cryst., ctns., 5-ton lots, works	lb	.35½	—

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